# FINAL REPORT - VOLUME 2
## Technical Appendices

# Central Freeway

# AREAWIDE TRAFFIC STUDY

prepared for

SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

**DEPARTMENT OF PARKING & TRAFFIC**
**CITY AND COUNTY OF SAN FRANCISCO**



WSA

**WILBUR SMITH ASSOCIATES**

November 1995

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**DEPARTMENT OF PARKING & TRAFFIC**
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**WILBUR SMITH ASSOCIATES**
in association with
**Pittman & Hames Associates**
**De Leuw Cather and Company**
**Stevens & Associates**
**Shor Acoustical Consultants**

November 1995

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# INTRODUCTION

Volume II of the Central Freeway Areawide Traffic Study Report supplements the information contained in the Final Report of November, 1995. It is intended for users who seek much more detailed information than found in the Final Report and its distribution is much more limited. Copies have been distributed as follows:

- San Francisco Department of Parking and Traffic
- San Francisco Department of City Planning
- Citizens' Advisory Task Force for the Central Freeway
- San Francisco's Main Public Library
- San Francisco County Transportation Authority
- San Francisco Municipal Railway
- California Department of Transportation - District 4
- Wilbur Smith Associates - Prime Consultant for the Study

Volume II is subdivided into two sections: Part A is a compendium of the technical memos produced during the study, Part B reproduces much of the material used in the community outreach portion of the study.

With the exception of Technical Memorandum #6, the Technical Memoranda are reproduced as they were when originally distributed to the Citizens' Advisory Task Force and the Technical Advisory Committee. In some cases information contained in the Final Report has been updated since the technical memoranda were published. Technical Memorandum #6 on Traffic Analysis was updated in November, 1995 because of a large amount of new material generated after the memorandum was originally published.

# PART A

# TECHNICAL MEMORANDA

# TECHNICAL MEMORANDUM #1
## Schedule and Meeting Agenda

# Central Freeway
# AREAWIDE TRAFFIC STUDY

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**CITY AND COUNTY OF SAN FRANCISCO**


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**WILBUR SMITH ASSOCIATES**



May 1995

# SCHEDULE AND MEETING AGENDA

## INTRODUCTION

The key objective of the second phase of the Central Freeway Areawide Traffic Study is to select a locally preferred alternative for the reinforced concrete segment of the freeway six months after Notice to Proceed with the contract. Once a preferred alternative is agreed upon, Caltrans can then proceed directly into design and environmental documentation.

## PROJECT SCHEDULE

A two-stage work program consisting of nineteen specific tasks will be employed to address these issues and develop technical and community consensus. The first stage will focus on developing the decision making framework, while the second phase of the study will focus on the technical evaluation of the alternatives. The tasks are listed as follows:

STAGE I - DECISION MAKING FRAMEWORK

Task 1 - Project Organization
Task 2 - Agency Meetings
Task 3 - Task Force and Community Meetings
Task 4 - Master Plan Consistency
Task 5 - Implementation Framework
Task 6 - Goals, Objectives and Evaluation Criteria
Task 7 - Alternatives Definition

STAGE II - ASSESSMENT OF ALTERNATIVES

Task 8 - Review Interim Improvements
Task 9 - Data Collection
Task 10 - Surface Street Support Alternatives
Task 11 - Freeway and Surface Street Operations Analysis
Task 12 - Noise and Visual Impact Assessment
Task 13 - Construction Period Impacts and Mitigation
Task 14 - Public Transit Impact Assessments
Task 15 - Cost Estimation

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Task 16 - Identification of Funding Strategy
Task 17 - Alternatives Comparison
Task 18 - Recommendation of Preferred Alternative
Task 19 - Project Report

The accompanying bar chart shows the overall schedule for accomplishing these tasks. The project started on March 9, 1995 and therefore is scheduled to be completed six months later on September 9, 1995.

## MEETING SCHEDULES

### Technical Advisory Committee

The TAC will be composed of one representative from each of the following agencies/groups:

Department of Parking and Traffic;
Planning Department;
Municipal Railway;
Transportation Authority;
Redevelopment Agency;
Department of Public Works;
Caltrans Project Manager;
Caltrans Traffic Operations; and
The Citizen's Task Force.

Regular TAC meetings will not be scheduled. Rather, the TAC will receive copies of all deliverables as indicated below:

Task 1 - Technical Memorandum #1: Schedule and Meeting Agenda

Task 2 - Minutes of TAC Meetings

Task 3 - Minutes of Task Force and Community Meetings

Task 5 - Technical Memorandum #2: Implementation Issues Memorandum

Task 6 - Technical Memorandum #3: Goals, Objectives and Evaluation Criteria

Task 7 - Drawings of Alternatives

Task 9 - Technical Memorandum #4: Data Collection and Analysis

Task 10 - Technical Memorandum #5: Freeway and Surface Street Concepts

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Task 11 - Technical Memorandum #6: Freeway and Surface Street Operations Analysis

Task 12 - Noise Impacts, Visual Photos of Alternatives

Task 13 - Technical Memorandum #7: Construction Schedules, Traffic Routing Plan and Analyses

Task 16 - Technical Memorandum #8: Funding and Implementation

Task 17 - Technical Memorandum #9: Alternatives Comparison

Task 18 - Technical Memorandum #10: Preferred Alternative

Task 19 - Draft Final Report

## Task Force and Community Meetings

Eight Citizen's Advisory Task Force meetings have been scheduled for the study (normally on the first Monday night of each month) at the 1660 Mission Street second floor conference room. Two large community meetings have been scheduled as well: one in May and one in August. The attached schedule indicates the current meeting schedule and expected publication date of newsletters. This schedule was developed by the Task Force Schedule Subcommittee with input from DPT and the Consultant Team.

In addition, the Task Force has formed the following subcommittees:

- Funding and Legislation
- Goals and Criteria
- Community Outreach
- Design Charrette
- Schedule

These subcommittees meet on an ad-hoc basis at 1660 Mission Street. The subcommittee meetings are publicly noticed.

## Attachments

A. Bar Chart Schedule
B. List of Community and Task Force Meetings (Adopted April 3, 1995).

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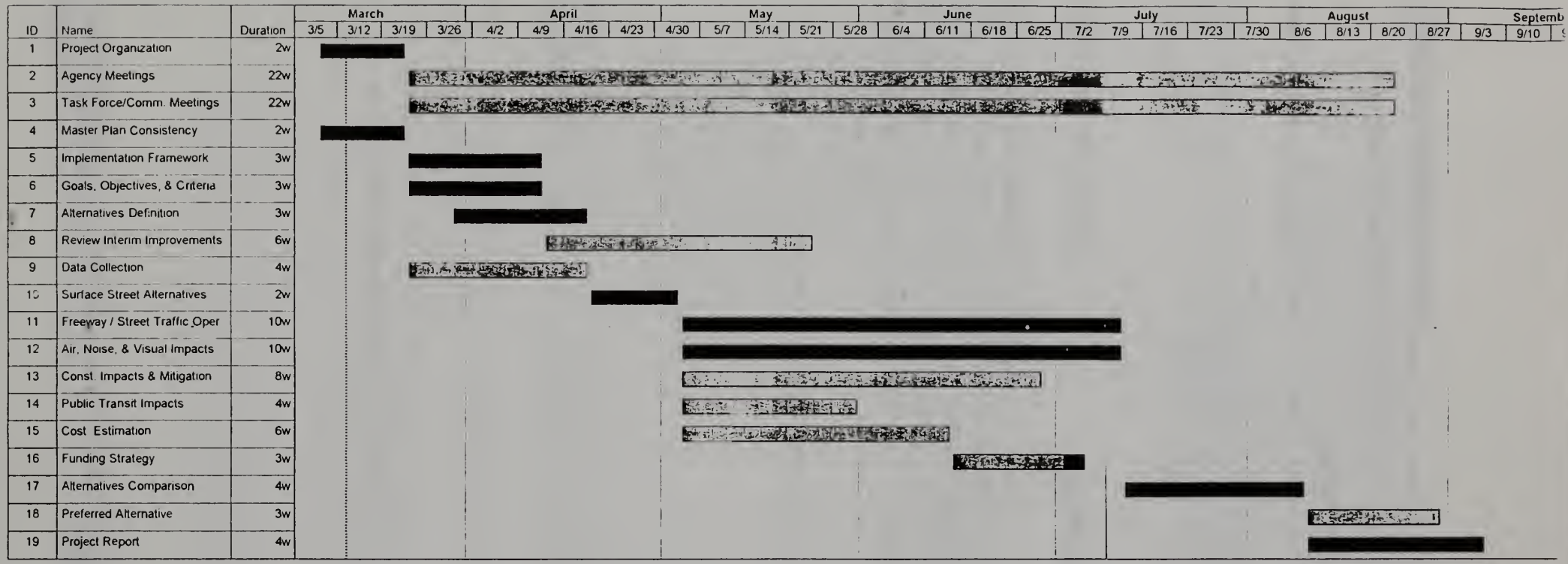


Project: Central Freeway Phase II
Date: 3/13/95

Critical
Noncritical
Progress
Milestone
Summary
Rolled Up

PageCentral Freeway Phase II

Project: Central Freeway Phase II
Date: 3/13/95

Critical
Noncritical

# CITIZENS ADVISORY TASK FORCE FOR THE CENTRAL FREEWAY
## Community Outreach Schedule and Work Program

| OUTREACH ACTIVITY | DATE | TOPIC OR PURPOSE |
|---|---|---|
| Task Force Meeting #1 | Monday,<br>April 3, 1995 | Review draft Public Outreach Schedule/Work Program<br>Finalize/Adopt Study Goals and Objectives |
| Task Force Meeting #2 | Tuesday,<br>April 18, 1995 | Review Alternatives Developed to Date<br>Present Retrofit Alternative (Caltrans) |
| Design Charrette #1 | Saturday,<br>April 22, 1995 | Task Force Alternative Design Charrette |
| Design Charrette #2 | Saturday,<br>April 29, 1995 | Task Force Alternative Design Charrette (continued) |
| Task Force Meeting #3 | Monday,<br>May 1, 1995 | Review Preliminary Study Alternatives |
| Community Meeting #1 | Week of<br>May 8 or 15, 1995 | Purpose: Community Screening of Alternatives |
| Task Force Meeting #4 | Monday,<br>June 5, 1995 | Present Study Alternatives<br>Discuss Implementation Issues<br>Describe Alternatives Analysis Process<br>Describe Traffic Simulation Model |
| Newsletter #1<br>Central Freeway Update | Week of<br>June 12 or 20, 1995 | Theme: Update on Project Status and Task Force Activities, Review of Study Alternatives, and Highlights of May Community Meeting |
| Task Force Meeting #5 | Monday,<br>July 10, 1995 | Review Status of Study Analysis to Date (e.g., initial model results, public transit impacts, environmental impacts)[1] |

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Adopted: April 3, 1995

| OUTREACH ACTIVITY | DATE | TOPIC OR PURPOSE |
|---|---|---|
| Task Force Meeting #6 | Monday,<br>August 7, 1995 | Evaluate Alternatives and Discuss Potential Funding and Implementation Strategies |
| Community Meeting #2 | Week of<br>August 14 or 21, 1995 | Purpose: Community Review and Evaluation of Alternatives |
| Newsletter #2<br>Central Freeway Update | Week of<br>September 4 or 11, 1995 | Theme: Alternatives Evaluation, Recommendations and Implementation Strategy |
| Task Force Meeting #8 | Monday,<br>September 11, 1995 | Recommend Final Alternative<br>Schedule Presentations to Commission |

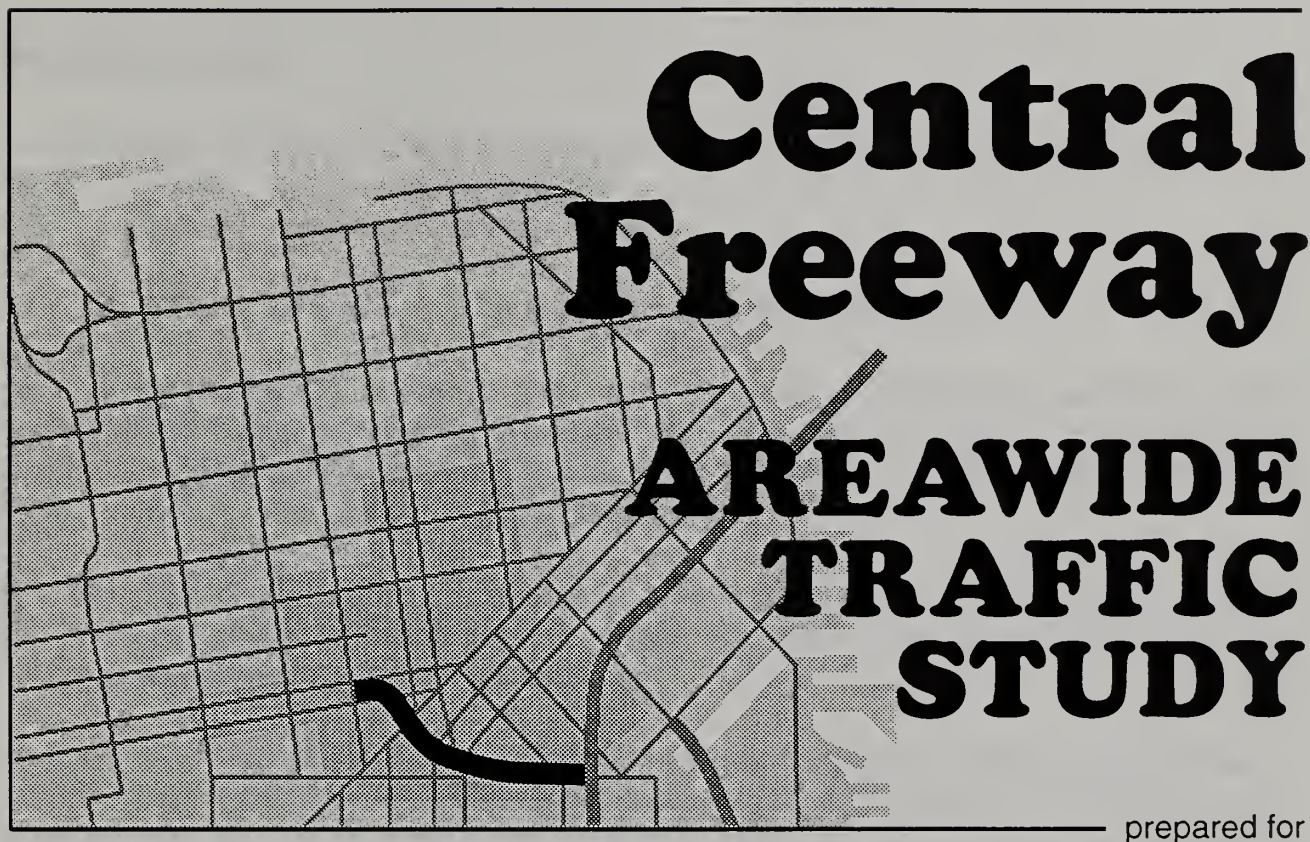
**Monthly Summary of Community Meetings and Newsletter Dates**

| | |
|---|---|
| May | Community Meeting #1 |
| June | Newsletter #1 |
| August | Community Meeting #2 |
| September | Newsletter #2 |

**Adopted: April 3, 1995**

**Prepared by: Pittman & Hames Associates**

# TECHNICAL MEMORANDUM #2
## Implementation Framework



# Central Freeway
# AREAWIDE TRAFFIC STUDY

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SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

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**CITY AND COUNTY OF SAN FRANCISCO**

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**WILBUR SMITH ASSOCIATES**

May 1995

# IMPLEMENTATION FRAMEWORK

## INTRODUCTION

Two important questions need to be addressed in evaluating Central Freeway (CF) alternatives:

1. How could the alternative be funded?

2. What is the time period for implementation of the alternative?

The first question is critical because current Federal emergency relief funding earmarked for the CF has less than $30 million remaining out of an original $40 million allocation. Most alternatives examined in Phase I are estimated to cost from $45 to 90 million and Caltrans' recently introduced "hybrid" retrofit is estimated to cost $64 million.

The second question is important because of the need to effectuate the project as soon as possible. The freeway structure is in need of a seismic retrofit. The longer it remains unchanged, the greater the probability of such a seismic event occurring.

These two issues are discussed in the remainder of this technical memorandum. At this time, we are not attempting to answer the questions but rather to raise various issues associated with project implementation and discuss various ways of dealing with them. The issues will be discussed in greater detail in Technical Memorandum #8 that will be produced after costs for the various alternatives are estimated.

## PROJECT FUNDING

### Emergency Relief Funds

Following the Loma Prieta earthquake, the U.S. Congress appropriated $1 billion in federal Emergency Relief (ER) funds for transportation repair and replacement assistance. Under federal regulations, these funds were available for obligation during the 180 days following the earthquake with no non-federal match requirements. These funds were used for such items as the Bay Bridge repairs, substitute ferry service, general clean up, and structural shoring work on damaged structures.

Following the 180 day period, the ER funds became available with a required match ratio that corresponded to the match requirement of the federal "system" of which the damaged transportation facility is part. In the case of the Central Freeway, which was part of the Federal Aid Primary system, the match ratio is approximately 85% federal and 15% non-federal.

By 1991, it was apparent that the damage to the regional freeway system would utilize the bulk of the ER funds, and this group of projects was referenced in a 1991 Federal Highway Administration (FHWA) memorandum entitled "Funding Schedule to Complete Loma Prieta Emergency Relief Work." This memorandum established an Emergency Relief "cap" for each project, citing the maximum amount of federal funds which would be available for project replacement and/or repair (see Table 1).

**Table 1**

EMERGENCY RELIEF FUNDING IN BAY AREA

| Project | Total Project Cost | Federal Share | ER Cap |
|---|---|---|---|
| Cypress Replacement | $1,121.0 M | $1,010.0 M | None |
| Terminal Separator | 85.5 M | 60.5 M | 60.5 M |
| Embarcadero | 133.0 M | 58.5 M | 58.5 M |
| Central Viaduct ("Freeway") | 44.3 M | 40.0 M | 40.0 |
| All Others | 324.0 M | 200.0 M | None |
| **TOTALS** | **$1,707.8 M** | **$1,369.0 M** | **NA** |

In reviewing this table it would appear that FHWA, in cooperation with Caltrans, assumed a Central Freeway replacement project that did not require a total reconstruction of the facility, as was the case with the Cypress and the Embarcadero. In other words, it appears that the lower replacement cost placed on the Central assumed a smaller construction project that would utilize seismically upgraded portions of the existing structure.

In addition to this constraint, the Central Freeway is the last project on the list to move through a planning, environmental and design process. Earlier projects were allocated ER funding in advance of knowing how much money would be required by the Central.

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Following requests from the City of San Francisco for verification of the justification for the Central's estimate, Caltrans responded with a February 27, 1995 letter from Caltrans District 4 Director, Joe Browne. In his letter Mr. Browne states the following:

> "The intent of Emergency Relief (ER) funds is to repair the transportation infrastructure to a serviceable level as soon as possible after the event, such as a natural disaster. It does not permit an upgrading of the facility and, conversely, requires that any replacement facility provide a comparable level of service. The $40 million of ER funds for the Central Freeway was based on the need to provide a serviceable facility after the Loma Prieta earthquake. This was based on the immediate need, at that time, to retrofit the existing structure. Obviously, conditions have changed and we are now looking at different alternatives. However, the ER funds are not subject to that flexibility and are capped at $40 million."

A more recent letter to Mayor Jordan from Caltrans Director, James van Loben Sels, dated April 26, 1995, further seeks to justify the cap that was applied to the Central Freeway. The letter states:

> "The Central Freeway was capped by FHWA at $40 million in ER funding. The cap was established by FHWA when they agreed to participate with ER funds in only the portion of the structure that was double deck. The remainder of the work was to be funded through the State Transportation Improvement Program (STIP) process and would have to compete with other projects for funding. The entire $40 million has been obligated. Approximately $16.5 million has been spend, or is being spent on demolition, retrofit, and alternative project studies street repair. The remaining $23.5 million is reserved for the alternative Central Freeway Project."

State match would bring the total to $27 million, so it is obvious that current ER funds are very limited. Consequently, alternative funding sources should be considered during this study.

## Other Potential Funding Sources

There are three significant funding sources that are proposed to be explored as part of the this study. They include (1) the development of a new Senate Bill 181, tailored to the needs of the Central Freeway; (2) the provision of additional federal Emergency Relief funds; and (3) regional gas tax monies.

**Senate Bill 181 -** In March, 1990, Senator Kopp introduced a bill that significantly improved the funding capabilities of the Embarcadero Roadway. SB 181 allowed the City of San Francisco to remove State Highway Route 480 from the state system, assume all liabilities and responsibilities

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associated with that roadway, and turned over to the city the right of way that had previously been required as part of the roadway structure. The bill placed two conditions on this transaction:

First, the bill required that the sale or disposition of the property be used to fund the replacement project. It was assumed that this condition applied to the construction costs of the project. However, discussions are still outstanding as to whether this restriction could also include the maintenance costs of the project. In other words, perhaps it might be possible to develop a particular parcel and use the development proceeds as an annual maintenance fund for the project.

Second, the bill required that the Embarcadero Roadway replacement project provide "comparable accessibility" relative to the original transportation project. This restriction is a significant issue in the definition of replacement projects. It is clear that Caltrans does not view a purely local street improvement project as part of their responsibility. Moreover, if a replacement project is to receive ER funds, it must demonstrate its capacity and connectivity to other segments of the State system.

The Central Freeway alternatives provide varying amounts of surplus right of way and that could be sold to support the final preferred alternative (assuming the City is successful in requesting and obtaining legislation similar to SB 181). As part of this study, the consultant team will review the preliminary parcel analysis that has been conducted by the Department of Planning.

**Emergency Relief Stand-By Appropriation -** Another opportunity for additional funding is the annual Congressional Emergency Relief stand-by appropriation. Each year, the Congress appropriates $100 million, available to the end of the fiscal year, for transportation needs associated with natural disasters. If these funds are not fully expended in a given year, it may be possible to shift some of these monies to the Central Freeway alternative. The consultant team will evaluate the potential allocation of these funds and the procedural steps required to obtain them.

**New Regional Gas Tax Monies -** The Metropolitan Transportation Commission (MTC) is currently proposing a 1995 ballot measure that would allow up to an 8% gas fuel tax be allocated to the individual counties. The proposal, to be presented to the region's voters, would generate up to $300 million per year of additional transportation revenue. The funds are assumed eligible for both capital and operating costs. The passage of this measure, at an 8% level, would generate approximately $36 million per year for the City of San Francisco. A portion of these funds could potentially be made available to the Central Freeway.

**Discretionary Funds -** Other federal or state transportation funds that might be made available for the project.

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## Study Emphasis: Funding Issues

With this information as background, the consultant team will evaluate the following funding and implementation issues:

1. An evaluation will be conducted of the projected funding impact of similar legislation as the Embarcadero Roadway's SB 181. Each of the Central Freeway alternative footprints will be examined in light of current market rates and their potential contributions to overall project costs.

2. The team will review the allocation of funds from the on-going allocation of Emergency Relief funds provided annually by Congress.

3. Although not a particularly hopeful source of revenue, the consultant team will explore the regional funding opportunities that exist via the allocation of Intermodal Surface Transportation Enhancement Act (ISTEA) Surface Transportation Funds.

4. Last, the consultant team will examine the funding opportunities available to the Central Freeway via both regional gas tax funds and the allocation of existing San Francisco sales tax revenues.

## IMPLEMENTATION PERIOD

Major transportation construction projects involve five general tasks:

a. Planning
b. Environmental process
c. Preliminary Design
d. Final Design
e. Construction

Planning for the Central Freeway has been ongoing and will hopefully transition smoothly to the environmental process shortly after completion of the current study. The design and construction processes depend to some degree on the preferred alternative and will be estimated at a later date. This section of the memo concentrates on the environmental issues involved and their impact on the time required for project implementation.

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## Environmental Documentation

**Introduction -** How quickly the preferred alternative could be constructed depends to a large degree on the level of environmental documentation required. The discussion in this paper is based on review of the FHWA regulations of August 28, 1987 regarding FHWA implementation of National Environmental Protection Act (NEPA) requirements and discussions with Mara Melandry of Caltrans District 4 environmental. Although California Environmental Quality Act (CEQA) requirements are also in force, they essentially parallel the federal requirements so only the federal regulations are discussed in this paper.

There are essentially three levels of environmental documentation:

- Environmental impact statements or EIS's
- Categorical exclusions or CE's
- Environmental assessments or EA's

An EIS requires extensive analysis, public hearings and review procedures, so that the process seldom takes less than two years to accomplish. A CE moves much more quickly; requiring only a concurrent decision by Caltrans District 4 and FHWA, although some technical backup would be required to justify a CE. An EA process occurs when it is not clear whether or not an EIS would be required. If EA technical work indicates that no significant impacts would occur, a FONSI (finding of no significant impact) would be prepared. It is likely that the EA process leading to a FONSI could take place within a year.

**Caltrans Retrofit Alternatives -** Caltrans has determined that a CE can be granted for the current "Hybrid Alternative" that District 4 has been pursuing. That opinion is based on technical environmental studies done in 1994 that covered noise, air quality and aesthetic impacts in some detail.

Technically, that decision could be made without public involvement. However, if the hybrid alternative is chosen, Caltrans is committed to soliciting public input prior to making a formal decision. Public meetings, but not a formal public hearing would be held. Significant opposition to the alternative could cause Caltrans and FHWA to pursue a higher level environmental documentation (EA or EIS). Senate Bill 181 says that the City must concur with Caltrans.

**Other Alternatives -** If a preferred alternative other than the "hybrid" is selected, Caltrans and FHWA would need to determine the proper environmental route to take. The CE, EA or EIS processes are all potentially available and would have significant impact on project timing.

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A CE would still require the technical studies that were performed for the "hybrid" and probably take at least three months to complete. It would be safe to assume another two months for a public meeting and for a decision to be made. Environmental decisions are normally made at the District level.

The EA/FONSI route would probably require an equivalent time period for technical work but would involve more procedural time. The EA has a 30 day comment period and may (though it's not required) include a public hearing. After the comment period, the FHWA may then issue a FONSI. If it is determined that the project has significant impacts, an EIS will be required and a more lengthy process will be required.

The project could be declared an emergency action by Caltrans Director van Loben Sels in order to bypass many of the environmental requirements. However, this would most likely require closing of the freeway. Other than giving the project a high priority, there are no other ways to shorten the normal environmental process.

## Design and Construction

Preliminary design can occur concurrently with the environmental process, which would make sense since time is of the essence. We have assumed a total of 12 months after the end of the planning process to complete preliminary design.

After completion of the environmental process, it is probably reasonable to assume an average of 18 months for final design and advertising of the project and a further two years for construction. Of course, this depends on the complexity of the selected alternative.

## Overall Implementation Schedule

The tables below estimate the implementation schedule under the various environmental options. This will be updated as the study progresses.

| **Option 1: Categorical Exclusion** | |
|---|---|
| Planning | 6 months |
| Environmental | 5 months |
| Preliminary Design | 5 months |
| Final Design | 18 months |
| Construction | 24 months |
| TOTAL | 58 months |

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| **Option 2: EA/FONSI** | |
|---|---|
| Planning | 6 months |
| Environmental | 12 months |
| Preliminary Design | 0 months (concurrent w/environmental) |
| Final Design | 18 months |
| Construction | 24 months |
| TOTAL | 60 months |

| **Option 3: EIS** | |
|---|---|
| Planning | 6 months |
| Environmental | 24 months |
| Preliminary Design | 0 months (concurrent w/environmental) |
| Final Design | 18 months |
| Construction | 24 months |
| TOTAL | 72 months |

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# TECHNICAL MEMORANDUM #3
## Goals, Objectives & Evaluation Criteria

# Central Freeway
# AREAWIDE TRAFFIC STUDY

prepared for

SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

**DEPARTMENT OF PARKING & TRAFFIC**
**CITY AND COUNTY OF SAN FRANCISCO**

WSA

**WILBUR SMITH ASSOCIATES**

May 1995

# GOALS, OBJECTIVES, EVALUATION CRITERIA

## INTRODUCTION

Choosing a preferred alternative for the Central Freeway requires evaluating each alternative by various criteria that flow from the goals and objectives of the study. A number of sources were used to develop such goals, objectives and criteria. These include the City Master Plan, the Task Force Goals and Criteria Subcommittee and criteria developed in Phase I. This memorandum describes material from the various sources and proposes criteria to be used in Phase II.

## CITY MASTER PLAN OBJECTIVES AND POLICIES

The Transportation Element of the City's Master Plan is being updated at this time. Portions of the Plan relevant to the Central Freeway project are cited below. The source is an April 18 document prepared by the Planning Department for the Central Freeway project entitled "Master Plan Considerations - As Part of the Alternatives Screening Criteria." *(Note: These policies have not yet been officially adopted.)* The numbered statement in capital letters cites a Master Plan objective and is followed by policies supporting that objective.

1. MEET THE NEEDS OF ALL RESIDENTS AND VISITORS FOR SAFE, CONVENIENT AND INEXPENSIVE TRAVEL WITHIN SAN FRANCISCO AND BETWEEN THE CITY AND OTHER PARTS OF THE REGION WHILE MAINTAINING THE HIGH QUALITY LIVING ENVIRONMENT OF THE BAY AREA.

    - Involve citizens in planning and developing transportation facilities and services, and in further defining objectives and policies as they relate to district plans and specific projects.

    - Give priority to public transit as the means of meeting San Francisco's transportation needs, particularly those of commuters.

    - Ensure choices among modes of travel and accommodate each mode when and where it is most appropriate.

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2. USE THE TRANSPORTATION SYSTEM AS A MEANS FOR GUIDING DEVELOPMENT AND IMPROVING THE ENVIRONMENT.

- Use rapid transit and other transportation improvements in the city as catalysts for desirable development, and coordinate new facilities with public and private development.

- Reduce pollution and noise.

- Design and locate facilities to preserve the natural landscape and to protect views.

- Organize the transportation system to reinforce community identity, improve linkages among interrelated activities and provide focus for community activities.

- Provide incentives for the use of transit, carpools and vanpools, and reduce the need for new or expanded automobile and automobile parking facilities.

3. MAINTAIN AND ENHANCE SAN FRANCISCO'S POSITION AS A REGIONAL DESTINATION WITHOUT INDUCING A GREATER VOLUME OF THROUGH AUTOMOBILE TRAFFIC.

- The existing vehicular capacity of the bridges, highways and freeways entering the city should not be increased and, for single-occupant vehicles, should be reduced where possible.

- New elevated and surface freeways should bypass or terminate outside San Francisco, rather than pass through the city.

- Develop an efficient system of arterials and thoroughfares to distribute traffic from regional freeways within and through San Francisco's street grid in conjunction with the Bay Region's nine-county Metropolitan Transportation System (MTS).

- Promote I-880, I-80 (East Bay), 101 (North of San Rafael), I-580, I-680 and I-5 as the principal freeways for through automobile traffic and freight truck traffic in the Bay Area and the state.

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4. MAINTAIN AND ENHANCE SAN FRANCISCO'S POSITION AS THE HUB OF A REGIONAL, CITY-CENTERED TRANSIT SYSTEM.

   - Increase transit ridership capacity in all congested regional corridors.
   - Where significant transit service is provided, bridges and freeways should have priority transit treatment, such as exclusive transit lanes.

5. DEVELOP REGIONAL, MULTI-MODAL FACILITIES FOR THE EFFICIENT MOVEMENT OF FREIGHT AND GOODS.

   - Designate expeditious routes for freight trucks between industrial and commercial areas and the regional and state freeway system to minimize conflicts with automobile traffic and incompatibility with other land uses.

6. DEVELOP AND EMPLOY METHODS OF MEASURING THE PERFORMANCE OF THE CITY'S TRANSPORTATION SYSTEM THAT RESPOND TO ITS MULTI-MODAL NATURE.

   - Assess the performance of the city's transportation system by measuring the movement of people rather than merely the movement of vehicles.
   - Employ performance measures that address the problems of transportation deficiencies.
   - Employ methods that are easily measured, understandable, and useful both for determining the level of deficiency and for comparing alternatives with existing forecasting tools.
   - Consider the transportation system performance measurements in all decisions for projects that affect the transportation system.

7. MAINTAIN PUBLIC TRANSIT AS THE PRIMARY MODE OF TRANSPORTATION IN SAN FRANCISCO AND AS A MEANS THROUGH WHICH TO GUIDE FUTURE DEVELOPMENT AND IMPROVE REGIONAL MOBILITY AND AIR QUALITY.

   - Maintain and improve the Transit Preferential Streets program to make transit more attractive and viable as a primary means of travel.
   - Continue to favor investment in transit infrastructure and services over investment in highway development and other facilities that accommodate the automobile.

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8. DEVELOP AND IMPLEMENT A PLAN FOR OPERATIONAL CHANGES AND LAND USE POLICIES THAT WILL MAINTAIN MOBILITY AND SAFETY DESPITE A RISE IN TRAVEL DEMAND THAT COULD OTHERWISE RESULT IN SYSTEM CAPACITY DEFICIENCIES.

- Reduce road congestion through the implementation of traffic control strategies, such as signal-light synchronization and turn controls, that improve vehicular flow.

- Improve transit operation by implementing strategies that facilitate and prioritize transit vehicle movement and loading.

- Reduce congestion by encouraging alternatives to the private auto through the reservation of right-of-way and enhancement of other facilities dedicated to multiple modes of transportation.

9. ESTABLISH A STREET HIERARCHY SYSTEM IN WHICH THE FUNCTION AND DESIGN OF EACH STREET ARE CONSISTENT WITH THE CHARACTER AND USE OF ADJACENT LAND.

- Wherever feasible, divert through automobile and commercial traffic from residential neighborhoods onto major and secondary arterials, and limit major arterials to nonresidential street wherever possible.

- Design streets for a level of traffic that serves, but will not cause a detrimental impact on adjacent land uses.

- Discourage high-speed through traffic on local streets in residential areas through traffic "calming" measures that are designed not to disrupt transit service or bicycle movement, including:

  - Sidewalk bulbs and widenings at intersections and street entrances;
  - Lane off-sets and traffic bumps;
  - Narrowed traffic lanes with trees, landscaping and seating areas; and
  - Colored and/or textured sidewalks and crosswalks.

- Discourage non-local, through automobile traffic in and around parks and along the shoreline recreation areas.

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10. PROVIDE FOR CONVENIENT MOVEMENT AMONG DISTRICTS IN THE CITY DURING OFF-PEAK TRAVEL PERIODS AND SAFE TRAFFIC MOVEMENT AT ALL TIMES.

- Eliminate unnecessary cross traffic conflicts and improve traffic flow along major arterials.

- Promote increased traffic safety, with special attention to hazards that could cause personal injury.

11. IMPROVE THE CITY'S PEDESTRIAN CIRCULATION SYSTEM TO PROVIDE FOR EFFICIENT, PLEASANT, AND SAFE MOVEMENT.

- Provide sufficient pedestrian movement space with a minimum of pedestrian congestion in accordance with a pedestrian street classification system.

- Widen sidewalks where intensive commercial, recreational, or institutional activity is present and where residential densities are high.

- Maintain a strong presumption against reducing sidewalk widths, eliminating crosswalks and forcing indirect crossings to accommodate automobile traffic.

- Tow-away lane approvals should consider existing and potential pedestrian usage and level of service on abutting sidewalks, including the desirability of future sidewalk widening, as well as the needs of transit operation on the street.

- Ensure convenient and safe pedestrian crossings.

- Support pedestrian needs by incorporating them into regular short-range and long-range planning activities for all city and regional agencies and include pedestrian facility funding in all appropriate funding requests.

12. CONSIDER THE SIDEWALK AREA AS AN IMPORTANT ELEMENT IN THE CITYWIDE OPEN SPACE SYSTEM.

- Retain streets and alleys not required for traffic, or portions thereof, for pedestrian circulation and open space.

- Partially or wholly close certain streets not required as traffic carriers for pedestrian use or open space.

13. ENSURE THAT BICYCLES CAN BE USED SAFELY AND CONVENIENTLY AS A PRIMARY MEANS OF TRANSPORTATION, AS WELL AS FOR RECREATIONAL PURPOSES.

- Expand and improve access for bicycles on city streets and develop a well-marked, comprehensive system of bike routes in San Francisco.

- Develop a rational classification system of bicycle preferential streets.

14. DEVELOP AND MAINTAIN SELECTED MAJOR AND SECONDARY ARTERIALS EFFICIENT AND DIRECT ROUTES FOR TRUCKS/SERVICE VEHICLES INTO AND THROUGH SAN FRANCISCO WITHOUT DISTURBING NEIGHBORHOOD AREAS AND INHIBITING THE SAFE MOVEMENT OF TRANSIT VEHICLES, BICYCLES AND PEDESTRIANS.

- Improve the existing regional network of truck routes by making designated routes in San Francisco convenient for non-local freight trips with the aim of making the routes direct and connected to other routes.

15. MAKE FREEWAY AND MAJOR SURFACE STREET IMPROVEMENTS TO ACCOMMODATE AND ENCOURAGE TRUCK/SERVICE VEHICLE TRAFFIC IN INDUSTRIAL AREAS AWAY FROM RESIDENTIAL NEIGHBORHOODS.

- Establish and maintain advisory truck routes, with clear signage, between industrial areas and freeway interchanges to enhance truck access and to clearly and visibly attract truck traffic away from residential neighborhoods.

- Accommodate heavy vehicles with extra-large loads on major truck routes by ensuring vertical clearances, appropriate intersection design for maneuvering and providing signal timing to allow smooth truck progression.

- Implement measures to reduce adverse effects from trucks/service vehicles and rail traffic by enforcing restrictions on certain routes, specific areas or times of day.

## CITIZENS ADVISORY TASK FORCE GOALS AND CRITERIA

The Task Force established a subcommittee that developed various goals and criteria for evaluating the alternatives. These were reviewed by the full Task Force and officially adopted at the April 3 Task Force Meeting.

**Goal:** Select a preferred alternative of traffic and transit improvements for the Central Freeway corridor.

**Criteria:**

- Minimize negative visual impacts.
  - Apply good urban design principles.
  - Recognize the importance of Market Street as a visual corridor, a major public transit corridor, and a grand boulevard, and advance the City's efforts to improve Market Street.
  - Preserve the historic character and structures of the affected neighborhoods.

- Promote neighborhood cohesion.
  - No single neighborhood should bear the burden of freeway traffic.
  - High-volume traffic should be routed around neighborhoods and onto major traffic arteries.
  - Design should encourage traffic to move within legal speed limits.

- Allow the maximum reclamation of freeway land for housing, open space, and neighborhood-serving commercial uses.

- Allow for better management of all elements of the transportation system (Multimodalism)
  - Promote public transit operations and the City's Transit-Preferential Streets Program.
  - Facilitate pedestrian access to public transit.
  - Be compatible with both the existing public transit system and planned improvements.

- Accommodate traffic circulation.
  - Allow for better integration of the freeway system with the system of City streets.
  - Offer better choices of freeway access/egress direction.
  - Minimize disruption during construction period.

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- Promote a healthy environment.
  - Respect and improve the quality and integrity of public open spaces.
  - Allow for safe neighborhood streets.
  - Promote improved air quality and reduction of noise impacts.

## PHASE I EVALUATION CRITERIA

Phase I of the Central Freeway Areawide Traffic Study also listed a set of evaluation criteria based on the City Master Plan, input from the Task Force and the Technical Advisory Committee. These criteria were intended to help compare and evaluate various alternatives. These criteria are summarized below.

**Visual Impacts:** How massive is the freeway structure? Is there opportunity to improve it and the freeway right-of-way as visual entities? What is the impact on views up and down Market Street?

**New Right-of-Way:** Would new right-of-way need to be acquired?

**Developable Land:** How much land currently reserved as transportation right-of-way could be freed-up for other uses?

**Neighborhood Impacts:** What are the impacts on the living and pedestrian environment on neighborhoods north and south of Market?

**MUNI Impacts:** What impacts would the alternative have on MUNI bus and light rail service in terms of improvement or degradation of traffic flow or required realignment of routes?

**Traffic Congestion:** How many key intersections would operate at levels of service E and F.

**Traffic Crossing Market At-Grade:** How much traffic would cross Market Street on the surface, thereby creating potential congestion.

**Design Safety:** What compromises (if any) in Caltrans design standards might have to be made to effectuate the alternative? What is likely to be the overall impact on traffic safety resulting from the alternative?

**Construction Impacts:** How will traffic flow and neighborhood livability be impacted during the construction period?

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**Estimated Completion Date:** How long is it likely to take for completion of the alternative, considering the environmental process, design and construction?

**Cost:** What is the estimated cost to construct the alternative?

## SUMMARY OF GOALS AND CRITERIA

Based on the foregoing, Table 1 indicates evaluation criteria that are recommended for use in evaluating the alternatives. The criteria are based on the following:

1. Conformance with the Task Force's adopted criteria.

2. Addition of other criteria that would be used by implementing and approving agencies in evaluating the alternatives.

3. Factors that can be measured (quantitatively where possible, but at least qualitatively).

Quantitative factors, such as cost would be tabulated directly. It is proposed that qualitative factors be shown as follows:

| | |
|---|---|
| ++ | Very positive |
| + | Positive |
| 0 | No significant impact |
| - | Negative |
| -- | Very negative |
| FF | "Fatal Flaw" |

Since the various interested parties tend to have differing priorities, it is not proposed to prioritize or weight the criteria. Rather, a matrix indicating all relevant factors will be prepared to facilitate review by all.

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**Table 1**

PROPOSED EVALUATION CRITERIA
Page 1 of 2

| |
|---|
| **Visual** |
| Length of elevated structure (miles) |
| Relative bulk of the elevated structure? |
| Views down Market Street to Ferry Building. |
| Visual Impact on Market Street |
| Visual impact on Octavia Street corridor |
| Is the alternative in keeping with character of adjacent neighborhood? |
| **Neighborhood Cohesion** |
| Does the alternative help tie together neighborhoods? |
| Hayes Valley |
| South of Market |
| Panhandle |
| Mission |
| Castro |
| Does the alternative increase traffic on neighborhood streets? |
| **Right-of-Way** |
| Additional right of way required (acres) |
| Number of structures taken |
| Current right-of way not required (acres) |
| **Multimodalism** |
| Impact on Market Street transit |
| Impact on Mission Street transit |
| Impact on Haight/Page transit |
| Pedestrian access to transit stops |
| Compatibility with proposed future transit |
| Impact on bicycle and pedestrian travel |

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**Table 1**

PROPOSED EVALUATION CRITERIA
Page 2 of 2

| |
|---|
| **Traffic** |
| Does the alternative simplify the freeway/street system? |
| Does the alternative increase options for travel through City? |
| Do queues on the Central extend to the James Lick Freeway? |
| Number of intersections at level of service E and F |
| Aggregate delay time and vehicle miles of travel in study area |
| Streets where traffic increases are greater than 10% |
| Can freeway traffic be maintained during construction? |
| Total traffic delay time during construction period |
| Volume versus capacity of traffic crossing Market Street |
| Level of service on congestion management network |
| **Environment** |
| Impact on public open spaces |
| Air quality impacts (VMT and intersection delay) |
| Noise impacts on sensitive receptors |
| Construction period impacts |
| **Financial and Implementation Considerations** |
| Cost to construct alternative |
| Availability of funding |
| Probable level of environmental documentation required |
| Time required to complete project |
| **Safety** |
| Design standards affecting safety |
| Pedestrian and bicycle safety on streets |
| Safety of motorists and others during construction process |

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# TECHNICAL MEMORANDUM #4

## Existing Traffic Conditions

# Central Freeway

# AREAWIDE TRAFFIC STUDY

prepared for

SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

**DEPARTMENT OF PARKING & TRAFFIC**
**CITY AND COUNTY OF SAN FRANCISCO**

WSA

**WILBUR SMITH ASSOCIATES**

July 1995

# EXISTING TRAFFIC CONDITIONS

## INTRODUCTION

An accurate understanding of existing traffic conditions on the Central Freeway, its ramps and on surface streets near the ramps is critical to understanding traffic impacts associated with changes to the Central Freeway. A series of traffic surveys was conducted for this Phase II Study to supplement data collected during Phase I of the Central Freeway study and data provided by the City and Caltrans.

Technical Memorandum #4 describes four important features of existing traffic conditions:

1. Traffic volumes on the Central Freeway and its ramps;
2. PM peak hour traffic volumes at principal intersections;
3. An analysis of traffic crossing Market Street and its relationship to available capacity; and
4. Freeway queuing characteristics.

## FREEWAY AND RAMP TRAFFIC VOLUMES

Traffic volumes vary by hour of the day and day of the week on the Central Freeway. In order to describe hourly and daily variations and to identify the PM peak traffic hour, machine traffic counts were conducted at all Central Freeway ramps for an entire week along with a review of Caltrans mainline freeway counts.

Figure 1 describes the average weekday PM peak hour traffic volumes on the Central Freeway and its ramps. The PM peak hour traffic volumes represent the highest 60-minute count during the three-hour PM peak hour commute period (3 to 6 PM) on a Tuesday, Wednesday or Thursday. Key features shown in Figure 1 include:

- A total of 5,400 (2,800 + 2,600) vehicles per hour (vph) crossing above Market Street to/from the Oak/Fell Street ramps;

- A total of 8,100 (4,200 + 3,900) vph on the Central Freeway east (south) of the South Van Ness Avenue ramp;

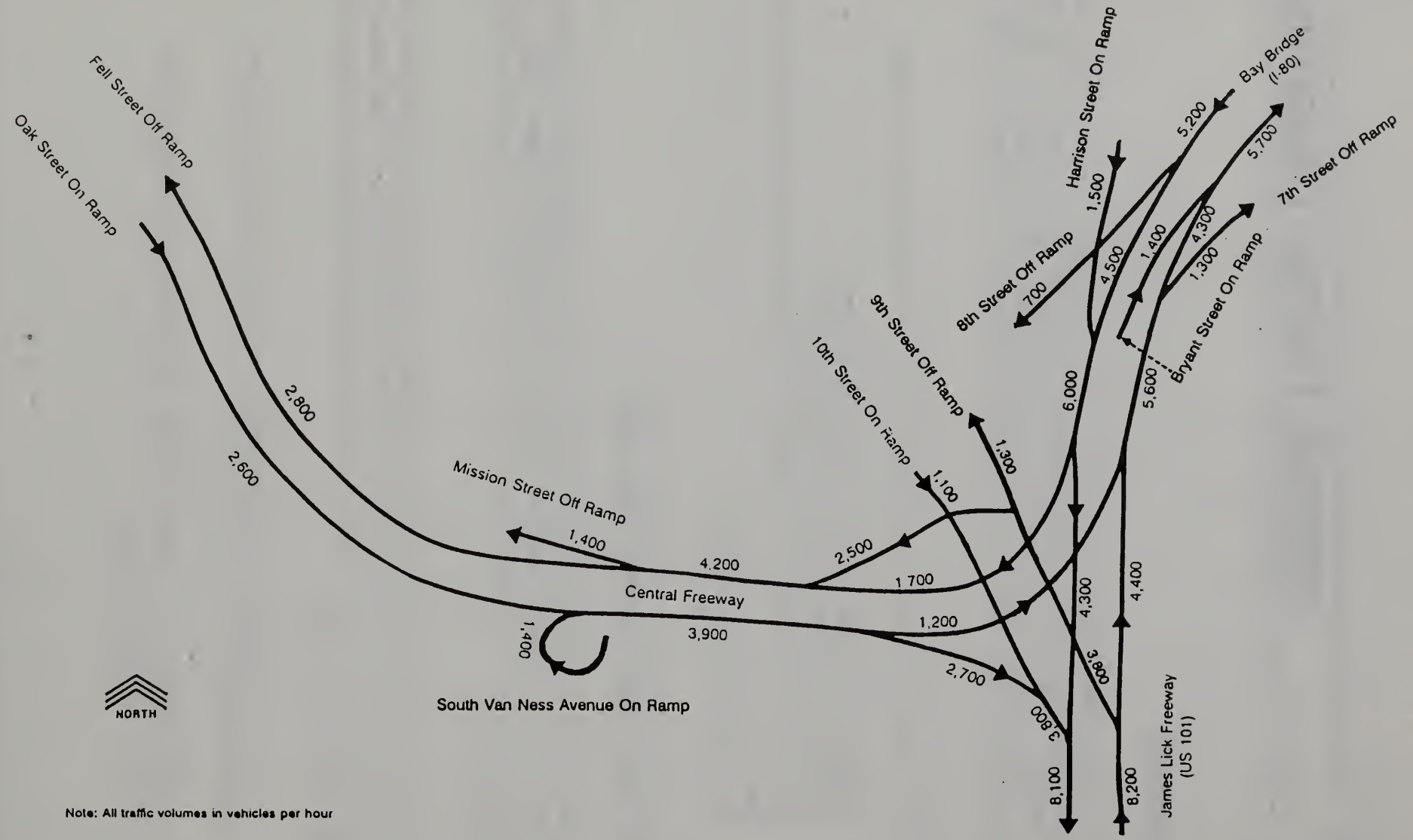


Figure 1

**1995 FREEWAY AND RAMP VOLUMES - WEEKDAY PM PEAK HOUR**

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- A pronounced orientation of Central Freeway traffic towards US-101 South 5,200 (2,500 + 2,700) vph (64 percent) versus towards the Bay Bridge 2,900 (1,700 + 1,200) vph (36 percent);

- The Mission Street and Fell Street off-ramps serve a total of 4,200 vph of freeway exit traffic and the Ninth, Eighth and Seventh Street off-ramps serve a total of 3,300 vph during the PM peak hour; and

- The Oak Street and South Van Ness Avenue on-ramps serve a total of 4,000 vph during the PM peak hour and on-ramps at Tenth Street, Harrison Street and Bryant Street serve an additional 4,000 vph.

Table 1 summarizes the weekday PM peak hour traffic volumes for principal on/off-ramps and connector ramps.

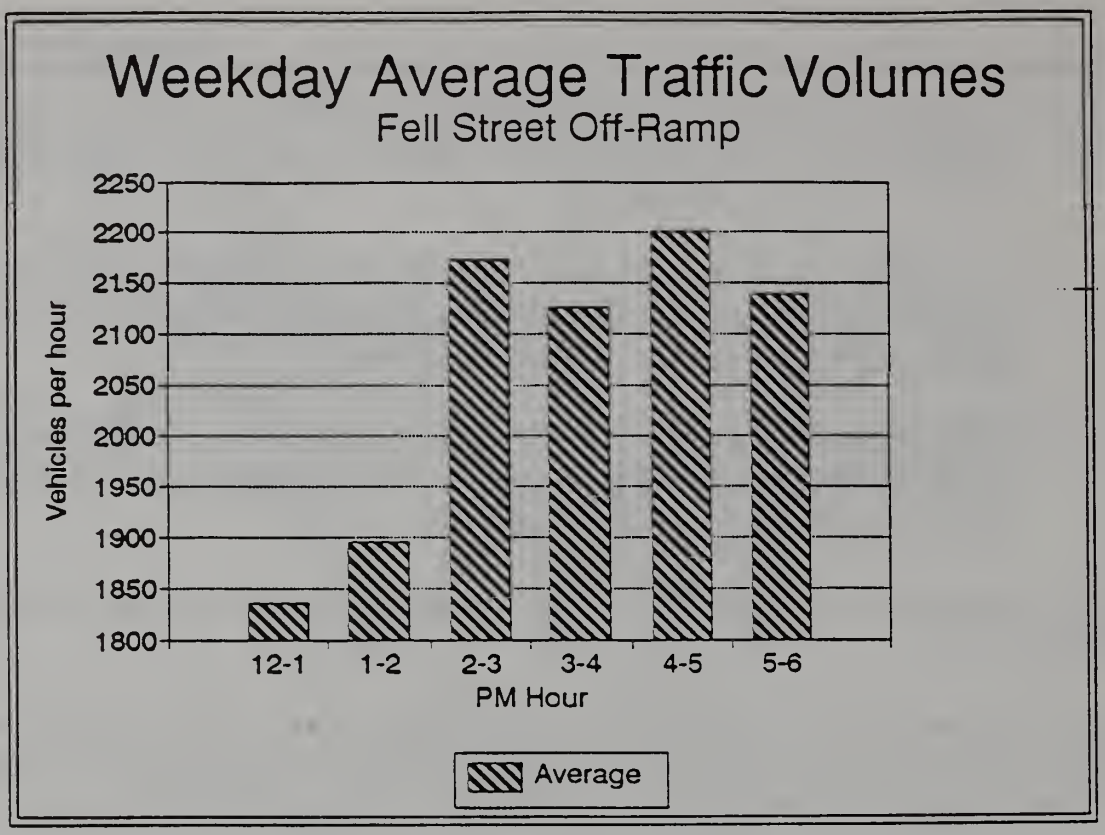
Figure 2 describes the average hourly traffic volume exiting at the Fell Street ramp from noon to 6 PM on an average weekday. Variations in 4 to 5 PM and 5 to 6 PM hourly traffic volumes by day of the week for the Fell Street off-ramp are shown at the bottom of Figure 2.

Observation of traffic flow indicates that volume on the Central Freeway is reduced when traffic on the James Lick Freeway or I-80 is congested. For example, traffic backups due to Bay Bridge congestion sometimes impedes traffic northbound on the James Lick Freeway destined for the Central Freeway. Similarly, congestion at the Central Freeway southbound merge onto the Central Freeway or at Hospital Curve sometimes impedes the volume of traffic from the Bay Bridge which can enter the Central Freeway.

## INTERSECTION TRAFFIC VOLUMES

Traffic counts were conducted at 33 key study intersections during the PM peak period in April, 1995. Traffic volumes at these 33 locations shown in Figure 3 represent the highest 60-minute count on a weekday (Tuesday to Thursday) during the PM peak period (4 to 6 PM) in April 1995. At some locations, minor adjustments were made to the raw count data in order to reconcile differences in traffic volumes between adjacent intersections. The intersection counts were not conducted on the same day in April 1995, as the machine counts for freeways and ramps were recorded. Hence, some small discrepancy exists between ramp volumes shown in Figures 1 and 2 and intersection turning movements shown in Figure 3.

Traffic volumes at ten other intersections were derived from counts conducted in other studies conducted in 1994. These studies include the *Central Freeway Areawide Traffic Study (Phase 1)*, *Hayes Valley Housing Traffic Study*, and *150 Oak Street Traffic Study*.



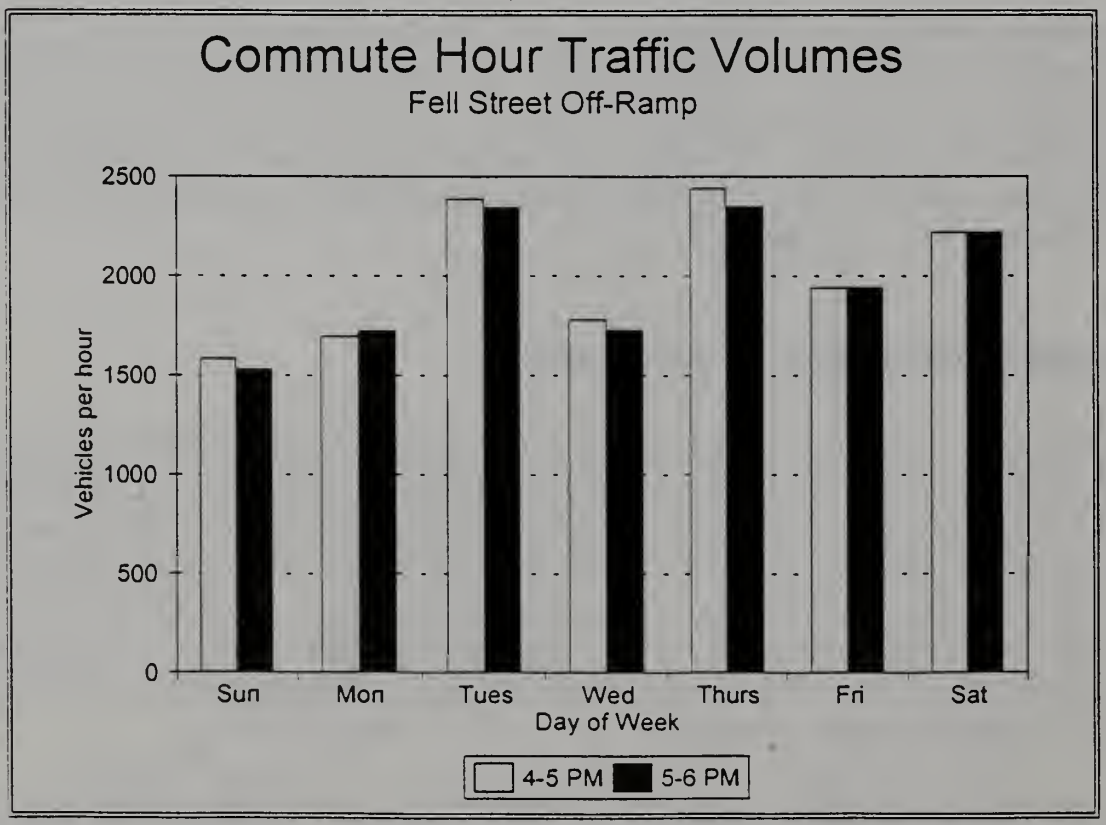




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Figure 2

**FELL STREET OFF-RAMP TRAFFIC VOLUME ANALYSIS**

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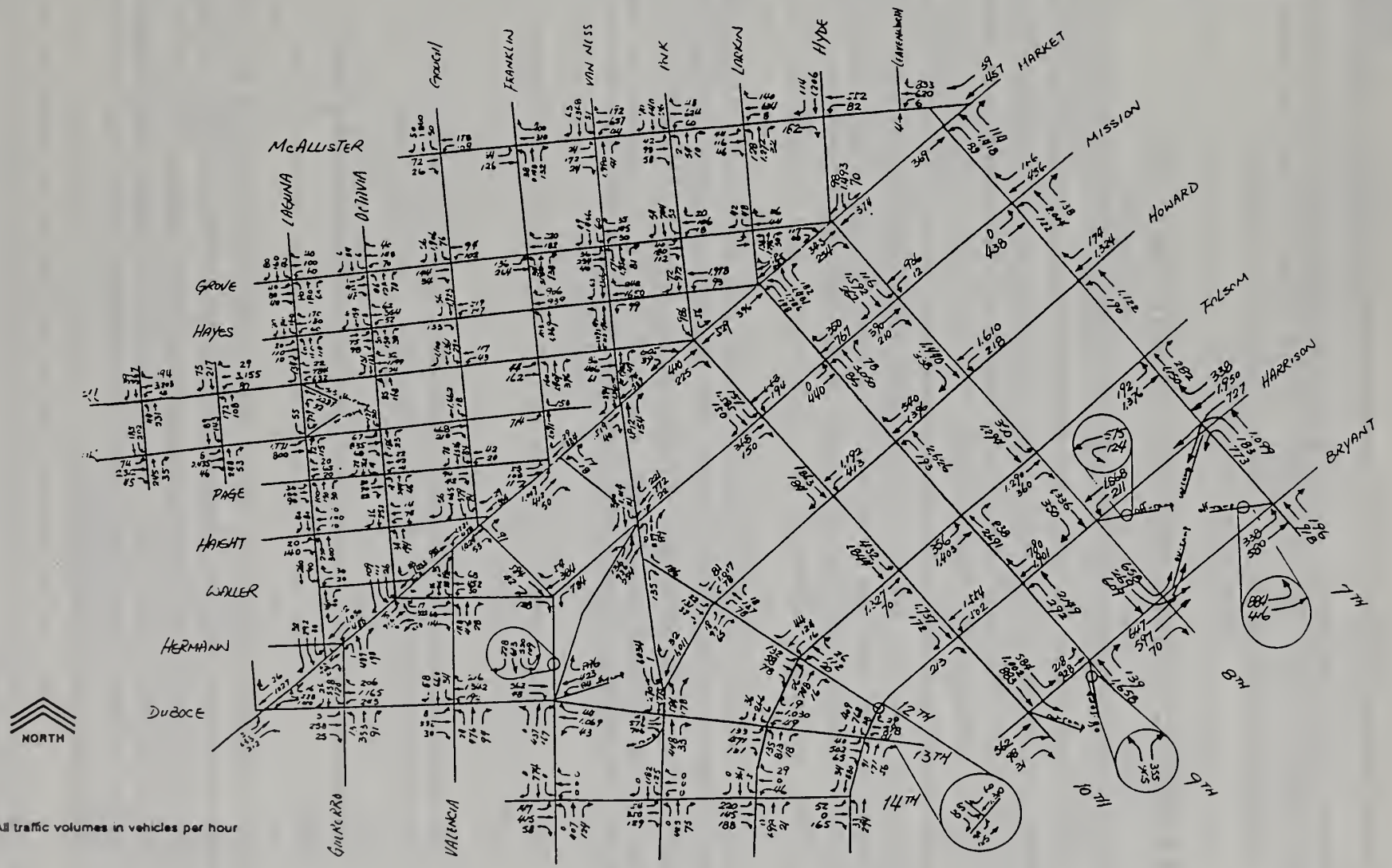



Note: All traffic volumes in vehicles per hour

Figure 3

**1995 INTERSECTION TRAFFIC VOLUMES (WEEKDAY PM PEAK HOUR)**

All 33 intersection traffic counts were completed prior to the Market Street F Line construction which began on May 14, 1995. This work involved partial closure of Van Ness Avenue and detouring of traffic onto Gough Street.

## MARKET STREET CROSSING RESERVE CAPACITY ANALYSIS

An important planning issue is the traffic implication of demolishing the Central Freeway and not rebuilding it across Market Street. To preliminarily address this issue, a comparison was performed relating existing traffic volumes crossing Market Street to the estimated traffic capacities of existing Market Street intersection crossings. This analysis is a snapshot of existing conditions and does not attempt to reflect opportunities to increase capacities. The term "reserve capacity" is intended to describe unused capacity potentially available to accommodate Central Freeway Oak/Fell ramp traffic which would be diverted to surface street crossings by several project alternatives. Another term, "saturation flow rate," represents an estimate of the volume of traffic a lane of traffic could carry under ideal conditions if allocated 100 percent of the traffic signal "green time." These estimates are based on field measurement for each of the Market Street intersections.

Traffic volumes were studied to determine the reserve capacities available for through traffic crossing Market Street during the weekday PM peak hour. This was done by comparing existing traffic volumes shown in Table 2 with an estimate of traffic capacity for cross traffic at Market Street intersections. The distribution of through traffic crossing Market Street is presented in Table 2. Cross Market Street capacity was estimated by a three-step process:

1. The ideal maximum saturation flow rate per traffic lane was estimated based on surveys at each intersection;

2. The existing amount of traffic signal "green time" allocated to cross Market Street traffic was obtained from City records; and

3. Adjustments were made to recognize capacity losses related to turning traffic delays.

Table 3 provides a summary comparison of existing traffic volumes versus maximum capacity and the resultant amount of reserve traffic capacity at each intersection and for the entire study segment of Market Street. Some limited capacity increases might be possible by additional peak period curb parking prohibitions and minor traffic signal re-timings. Major reallocation of traffic signal green time away from Market Street to accommodate increased cross traffic is limited due to MUNI bus service needs (particularly east of Franklin Street).

The reserve capacity for all northbound and southbound through traffic was compiled separately and compared to the total capacity. As shown in Table 3, the northbound through traffic crossing

**Table 2**
**SUMMARY OF THROUGH TRAFFIC CROSSING MARKET STREET**
**WEEKDAY PM PEAK HOUR**

| Cross Street | Direction | Through Volume (vph) /a/ | Percent |
|---|---|---|---|
| Central Freeway | NB | 2,800 | 24 % |
| Duboce - Buchanan | NB | 230 | 2 % |
| Guererro - Laguna | NB | 490 | 4 % |
| McCoppin - Octavia | NB | 320 | 3 % |
| Valencia & South Gough - Market-Franklin | NB | 580 | 5 % |
| South Van Ness - Van Ness | NB | 1,480 | 13 % |
| Ninth - Hayes | NB | 1,790 | 15 % |
| Ninth - Larkin | NB | 1,480 | 13 % |
| Seventh | NB | 1,420 | 12 % |
| Sixth - Taylor-Turk | NB | 630 | 6 % |
| **Northbound Total** | | **11,550** | **100 %** |
| Central Freeway - James Lick Freeway | SB | 2,600 | 28 % |
| Laguna - Guererro | SB | 290 | 3 % |
| Octavia - McCoppin | SB | 130 | 1 % |
| Gough - Market-Valencia | SB | 480 | 5 % |
| Gough - South Gough-Otis | SB | 580 | 6 % |
| Van Ness - South Van Ness | SB | 1,260 | 14 % |
| Fell - Tenth | SB | 610 | 7 % |
| Polk - Tenth | SB | 990 | 11 % |
| Grove - Eighth | SB | 120 | 1 % |
| Hyde - Eighth | SB | 1,490 | 16 % |
| Golden Gate - Sixth | SB | 730 | 8 % |
| **Southbound Total** | | **9,260** | **100 %** |

/a/ All volumes are rounded to the nearest 10 vehicles per hour (vph).

Wilbur Smith Associates; July 1995

Table 3
SUMMARY OF RESERVE CAPACITY OF THROUGH TRAFFIC CROSSING MARKET STREET )
WEEKDAY PM PEAK HOUR

| Cross Street | Direction | No. of Through Lanes | Total Capacity (vph) /a/ | Approach Volume (vph) /b/ | | Reserve Capacity (vph) /d/ | Percent RC of Total Capacity | Remark |
|---|---|---|---|---|---|---|---|---|
| | | | | Thru Movement | Total /c/ | | | |
| Central Freeway | NB | 2 | 2,600 | 2,800 | 2,800 | 0 | 0 % | At Capacity |
| Duboce - Buchanan | NB | 1 | 440 | 230 | 240 | 00 | 45 % | |
| Guererro - Laguna | NB | 2 | 770 | 490 | 490 | 280 | 36 % | |
| McCoppin - Octavia | NB | 1 | 400 | 320 | 320 | 80 | 20 % | |
| Valencia & South Gough - Market-Franklin | NB | 2 | 990 | 580 | 1,010 | 0 | 0 % | At Capacity |
| South Van Ness - Van Ness | NB | 3 | 1,890 | 1,810 | 1,970 | 0 | 0 % | At Capacity |
| Ninth - Hayes | NB | 3 | 1,860 | 1,790 | 1,930 | 0 | 0 % | At Capacity |
| Ninth - Larkin | NB | 2 | 1,460 | 1,480 | 1,480 | 0 | 0 % | At Capacity |
| Seventh | NB | 3 | 1,770 | 1,420 | 1,620 | 150 | 8 % | |
| Sixth - Taylor-Turk | NB | 2 | 800 | 630 | 630 | 170 | 21 % | |
| | Northbound Total | | **13,200** | **11,550** | **12,490** | **880** | **7 %** | |
| Central Freeway - James Lick Freeway | SB | 2 | 2,600 | 2,600 | 2,600 | 0 | 0 % | At Capacity |
| Laguna - Guererro | SB | 1 | 730 | 290 | 360 | 70 | 0 % | |
| Octavia - McCoppin | SB | 1 | 240 | 110 | 250 | 0 | 0 % | At Capacity |
| Gough - Market-Valencia | SB | 1 | 540 | 480 | 480 | 60 | 11 % | |
| Gough - South Gough-Otis | SB | 2 | 900 | 580 | 660 | 240 | 27 % | |
| Van Ness - South Van Ness | SB | 3 | 1,680 | 1,260 | 1,660 | 130 | 8 % | |
| Fell - Tenth | SB | 2 | 680 | 610 | 610 | 80 | 12 % | |
| Polk - Tenth | SB | 2 | 1,020 | 990 | 990 | 30 | 3 % | At Capacity |
| Grove - Eighth | SB | 1 | 160 | 120 | 160 | 0 | 0 % | At Capacity |
| Hyde - Eighth | SB | 3 | 1,620 | 1,490 | 1,660 | 0 | 0 % | At Capacity |
| Golden Gate - Sixth | SB | 2 | 980 | 730 | 730 | 150 | 17 % | |
| | Southbound Total | | **10,750** | **9,260** | **10,050** | **760** | **7 %** | |

/a/ Total Capacity was determined using saturation flow rate, signal timing, clearance, and turn lane factors (adjustment for vehicle speeds and pedestrian activities).
/b/ All volumes are rounded to the nearest 10 vehicles per hour.
/c/ Total approach volume includes traffic volumes on the thru lanes, shared left-thru lane and shared thru-right lane, not exclusive left or right turn lanes.
/d/ Reserve Capacity (RC) = Total Capacity minus Total Approach Volume

Wilbur Smith Associates; July 1995

Market Street has a total reserve capacity of 880 vph or 7 percent of total capacity. Similarly, the southbound through traffic crossing Market Street has a total reserve capacity of 760 vph or 7 percent of total capacity.

Most of the reserve capacity is available at the Duboce-Buchanan Street, Guererro-Laguna Street and McCoppin-Octavia Street crossings of Market Street. However, these cross streets tend to be narrow and are not attractive routes for San Franciscans and visitors alike. Although the Seventh Street crossing of Market Street has some reserve capacity, queuing on the Seventh Street approach to McAllister Street can potentially overflow and block the northbound traffic flow. The Sixth Street crossing of Market Street has some reserve capacity. All other crossings of Market Street are at or near capacity. Northbound traffic from Valencia Street and South Gough Street crosses Market Street by making an eastbound left-turn onto Franklin Street. Valencia Street and South Gough Street have some reserve capacity for northbound right-turn onto Market Street, however, the eastbound left-turn onto Franklin Street is at capacity. The Ninth Street crossing of Market Street to Hayes Street and Larkin Street is at capacity.

## FREEWAY QUEUING CHARACTERISTICS

Freeway queuing (traffic stacking or congestion) data was collected using field observations and video tapes filmed during a weekday and weekend afternoon in April, 1995. In addition, several video tapes of the James Lick Freeway/Bay Bridge interchange traffic were obtained from Caltrans. Analysis of existing freeway queuing conditions was based on field observations conducted and video tapes recorded prior to the Market Street F Line construction.

Queuing on the Central Freeway fluctuates considerably during the week and also during the year. In the summer months, weekend queues can be particularly long due to increased tourist activities and special events held in the City. On some days in the summer, queues at the Fell Street off-ramp were observed to be a minimum of 20 vehicles or longer on both lanes for almost the entire working day. At the Mission Street off-ramp, midday queues usually do not exceed ten vehicles in length per lane. Overall, traffic in the weekday PM peak period is the heaviest and results in long queues. Weekend queues can sometimes be as long or longer as during the weekday PM peak hour.

### Queue Storage Capacities

In the northbound direction, the Central Freeway has three travel lanes and provides approximately 2,050 feet or 82 vehicles per lane of queue storage capacity between the Bay Bridge/James Lick Freeway connector ramp merge junction and the Mission Street off-ramp diverge. This provides a total capacity to store 246 vehicles.

The Mission Street off-ramp has one travel lane (curb lane adjacent to the shoulder) at the freeway-ramp junction and widens to two lanes at approximately 200 feet from the freeway-ramp junction

and extends to the intersection. On this two-lane section of the off-ramp, each lane has a storage capacity of 28 vehicles or 700 feet. Including the 200-foot one lane ramp section, overall storage capacity would amount to 64 vehicles for the Mission Street off-ramp. Vehicles on the curb lane and the median lane are not always evenly distributed. While the curb lane stores vehicles making through and right turn movements, the median lane stores vehicles making through and left turn movements.

The Fell Street off-ramp has two travel lanes and has approximately 3,600 feet or 144 vehicles per lane of queue storage capacity. It widens to four approach lanes at the Fell/Laguna Street intersection, which provides some additional storage capacity (about 24 vehicles). Thus, a total vehicle queuing capacity of 312 vehicles is provided.

The connector ramp from the northbound James Lick Freeway to the Central Freeway has two travel lanes and provides approximately 2,150 feet or 86 vehicles per lane of additional storage capacity. Similarly, the connector ramp from westbound Interstate 80 to the Central Freeway has two travel lanes and provides approximately 1,850 feet or 74 vehicles per lane of additional storage capacity.

As summarized in Table 4, a grand total for storing 942 vehicles exists consisting of:

| | Vehicles | Percent |
|---|---|---|
| Connector Ramps | 320 | 34.0 |
| James Lick Freeway to Mission Street | 246 | 26.1 |
| Mission Street Off-Ramp | 64 | 6.8 |
| Fell Street Off-Ramp | 312 | 33.1 |
| **TOTAL** | **942** | **100.0** |

This absolute maximum stacking capacity represents about 13 minutes of storage for the 4,200 vph entering the Central Freeway during the PM peak hour.

The Oak Street on-ramp has two travel lanes from the Laguna Street intersection to approximately 800 feet downstream and provides 32 vehicles per lane of queue storage capacity on this initial segment. It widens to three lanes and extends for another 2,700 feet, providing an additional 108 vehicles-per-lane storage capacity. The Central Freeway has three travel lanes and provides 2,600 feet or 104 vehicles per lane of queue storage capacity between the Mission Street loop on-ramp and the Bay Bridge/James Lick Freeway connector ramp diverge junction. The South Van Ness Avenue loop on-ramp has one travel lane and provides 550 feet or 22 vehicles of queue storage capacity. The connector ramp from the Central Freeway to the James Lick Freeway has two travel lanes and provides 1,700 feet or 68 vehicles per lane of additional storage capacity. Similarly, the connector ramp from the Central Freeway to Interstate 80 has two travel lanes and provides 1,800 feet or 72 vehicles per lane of additional storage capacity. In total, the southbound section of the Central

**Table 4**
**QUEUE STORAGE CAPACITY ON FREEWAY SEGMENTS AND RAMPS**
**WEEKDAY PM PEAK HOUR**

| Freeway Segments, Connector Ramps and On/Off Ramps | | No. of Lanes | Queue Storage Capacity per Lane-Segment | | Queue Storage Capacity per Segment | | |
|---|---|---|---|---|---|---|---|
| | | | | | | Segment Total | |
| From | To | | Vehicles | Feet | Vehicles | Vehicles | Feet |
| Interstate 80 WB | Central Freeway NB | 2 | 74 | 1,850 | 148 | 148 | 3,700 |
| James Lick Freeway (US 101) NB | Central Freeway NB | 2 | 86 | 2,150 | 172 | 172 | 4,300 |
| Central Freeway NB Merge | Mission Street Off-Ramp Junction | 3 | 82 | 2,050 | 246 | 246 | 6,150 |
| Central Freeway NB Off-Ramp Junction | Mission Street[1] | 1 | 8 | 200 | 8 | 64 | 1,600 |
| | | 2 | 28 | 700 | 56 | | |
| Mission Street Off-Ramp Junction | Fell Street Off-Ramp[2] | 2 | 144 | 3,600 | 288 | 312 | 7,800 |
| | | 4 | 6 | 150 | 24 | | |
| | | | | | | | |
| Central Freeway SB | Interstate 80 EB | 2 | 72 | 1,800 | 144 | 144 | 3,600 |
| Central Freeway SB | James Lick Freeway (US 101) SB | 2 | 68 | 1,700 | 136 | 136 | 3,400 |
| Central Freeway Loop On-Ramp Junction | Central Freeway SB Diverge Point | 3 | 104 | 2,600 | 312 | 312 | 7,800 |
| South Van Ness Avenue SB | Central Freeway Loop On-Ramp Junction | 1 | 22 | 550 | 22 | 22 | 550 |
| Oak Street On-Ramp | South Van Ness Avenue SB On-Ramp[3] | 3 | 108 | 2,700 | 324 | 388 | 9,700 |
| | | 2 | 32 | 800 | 64 | | |

1 The Mission Street off-ramp begins with 1 lane, then widens to 2 lanes
2 The Fell Street off-ramp diverges to 4 approach lanes at the intersection
3 The Oak Street on-ramp begins with 2 lanes, then widens to 3 lanes approximately 600 feet downstream

NB = Northbound EB = Eastbound
SB = Southbound WB = Westbound

Freeway inclusive of on-ramps and freeway connector ramps provides 1,066 vehicles of storage approaching the James Lick Freeway.

| | Vehicles | Percent |
|---|---|---|
| Oak Street On-Ramp | 388 | 38.7 |
| South Van Ness Avenue On-Ramp | 22 | 2.2 |
| South Van Ness Avenue Ramp to Connector Ramps | 312 | 31.2 |
| Connector Ramps | 280 | 28.0 |
| **TOTAL** | **1,002** | **100.0** |

Therefore, total on-ramp storage approaching the James Lick Freeway amounts to about 15 minutes of the 3,900 PM peak hour flow rate.

### Weekday PM Peak Period Queuing Conditions - Northbound

Generally, weekday queuing on the Mission Street off-ramp begins at 4:30 PM. From then on, traffic and queuing conditions gradually worsen until 6 PM at which time queues begin to taper off. The average queue length during the PM peak period was observed to be about 40 vehicles or 1,000 feet in length on the curb lane. At some points during the peak period, queues from the Mission Street off-ramp can be as long as 60 vehicles in length which backs up onto the Central Freeway, and combine with the queues from the Fell Street off-ramp. Queues on the curb lane of the Mission Street off-ramp that back up to beyond the freeway-ramp junction often block vehicles from reaching the median lane of the off-ramp. About two to three times per month, queues on the Central Freeway back up and spill onto the James Lick Freeway. This is usually caused by a combination of heavy traffic and a lane blockage at one of the Central Freeway off-ramp junctions.

On the Fell Street off-ramp, queues usually begin to build up at 4 PM and reach an average queue length of about 55 cars per lane (1,400 feet) by 5 PM. On good days, the queue does not get much longer than this. On at least half of the weekdays, the queue continues to build up until around 6 PM at which time it usually levels off. The maximum queue observed for the Fell Street off-ramp was more than 85 vehicles per lane (2,100 feet). At that time, the queue extended from the stop bar at the Fell/Laguna intersection to 600 to 900 feet east/south of the Mission Street off-ramp.

Motorists have reported that queues on the Central Freeway occasionally spill onto the James Lick Freeway, although recent field observations failed to verify that condition. Queues on the James Lick Freeway often back up in one or both directions and, in effect, meter the volume of traffic able to reach the Central Freeway. This results in short queues in the early part of the peak period and longer queues in the later part of the peak as traffic starts moving on the James Lick Freeway and motorists can discharge onto the Central Freeway at a higher rate.

### Weekday PM Peak Period Queuing Conditions - Southbound

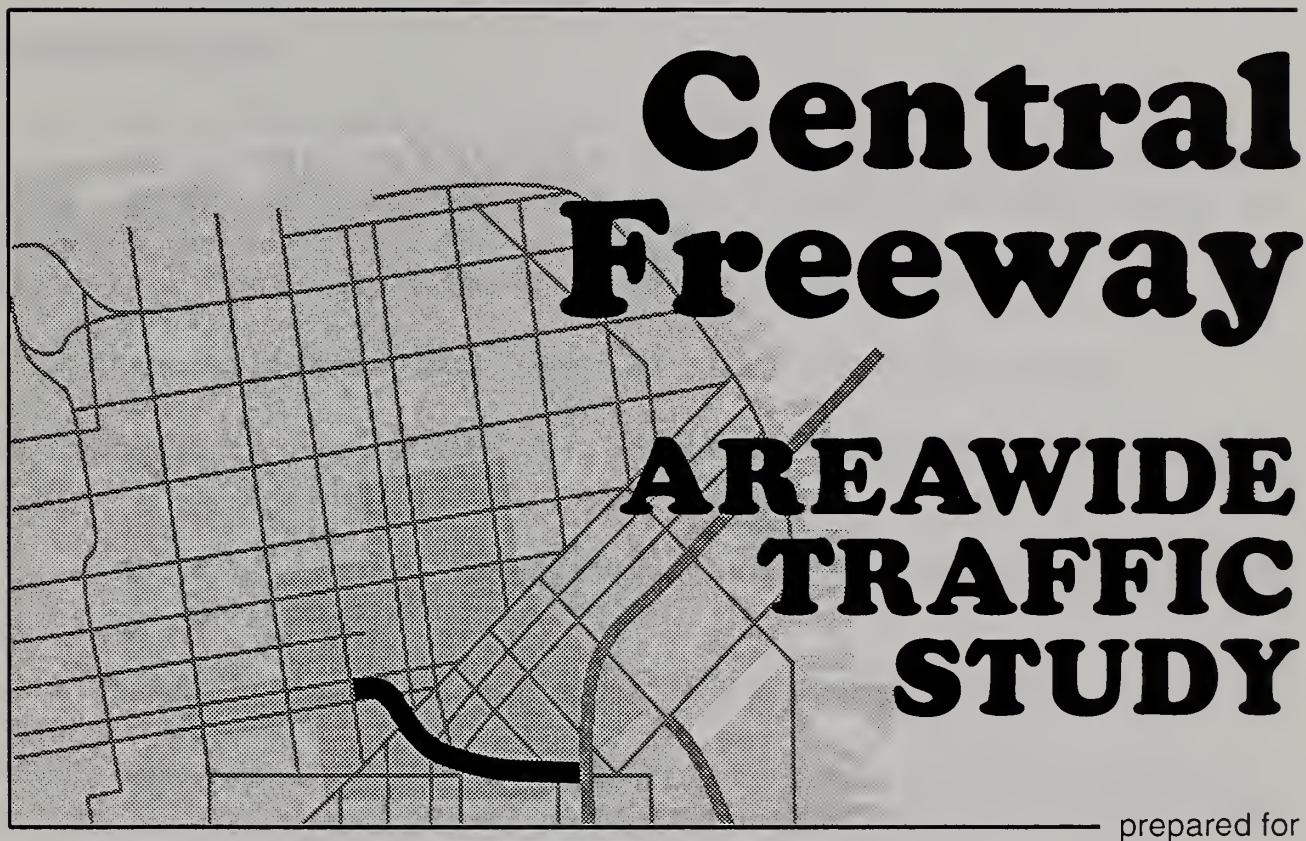
Congestion on the James Lick Freeway or approach to Interstate 80 often lead to queuing on the Central Freeway. A stalled vehicle or an accident on the Central Freeway or one of the connector ramps also generates long queues. Queues are commonly found on the connector ramps by 4:45 to 5:00 PM as backups from northbound Interstate 80 and/or "Hospital Curve" restrict flow exiting off the Central Freeway. The US 101 southbound connector ramp appears to experience congestion more often than the Bay Bridge/I-80 eastbound connector ramp. The US 101 southbound connector ramp has an average queue of 30 vehicles per lane measured from the gore point where the connector ramps diverge. The I-80 eastbound connector ramp has an average queue of 15 vehicles per lane measured from the merge with the James Lick Freeway. The maximum queue observed on the I-80 eastbound connector ramp was approximately 25 vehicles per lane (600 feet), backing up to just past the connector ramps diverge gore point.

### Weekend Peak Period Queuing Conditions

Queues of 40 to 50 vehicles per lane often form at the Fell Street off-ramp in the morning. However, maximum queues on the Central Freeway on a weekend generally occur during the mid to late afternoon. Such queues are often comparable or worse than those found during the weekday PM peak period. Major routes such as US 101 and the Fell/Oak Street corridor are usually congested. In contrast, alternate routes such as Ninth and Tenth Streets are underutilized. This often results in severe congestion southbound on Van Ness Avenue as many motorists, apparently unaware of alternate routes, queue up to access the one lane loop on-ramp on South Van Ness Avenue.

# TECHNICAL MEMORANDUM #5

## Study Alternatives



# Central Freeway

# AREAWIDE TRAFFIC STUDY

prepared for

SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

**DEPARTMENT OF PARKING & TRAFFIC**
**CITY AND COUNTY OF SAN FRANCISCO**

WSA

**WILBUR SMITH ASSOCIATES**

July 1995

# STUDY ALTERNATIVES

## INTRODUCTION

A wide range of facility and traffic operation concepts are under consideration for the Central Freeway. Technical Memorandum #5 describes alternative concepts which were defined for analysis during Phase II of the *Central Freeway Study*. Seven alternatives were defined including two proposed by Caltrans, two proposed by the Project Task Force and three by the Consultant Team. The seven Phase II alternative concepts for the Central Freeway are defined as:

**Alternative 1:** Seismic retrofit of the existing double deck freeway structure;

**Alternative 2:** Single deck retrofit elevated crossing of Market Street terminating at Fell Street;

**Alternative 3:** Low deck crossing of Market Street, with a depressed segment between Haight and Page Streets;

**Alternative 4:** Deep tunnel under MUNI Metro terminating at Fell Street;

**Alternative 5:** Dispersal of freeway traffic involving street reversals and segregation of Central Freeway off-ramp traffic approaching from the I-80 and US-101 freeways;

**Alternative 6:** Termination of the Central Freeway south of Market Street with direct ramps oriented toward the Gough/Franklin and Van Ness Avenue corridors; and

**Alternative 7:** Tenth Street Tunnel from Van Ness Avenue to Howard Street.

Detailed traffic modeling studies would be performed for Alternatives 1, 3, 5 and 6. Traffic features of Alternative 2 should be similar to Alternative 1 and Alternative 4 should be similar to Alternative 3. Alternative 7 should be somewhat similar to Alternative 6. A detailed traffic modeling study for Alternative 7 is not envisioned at this time.

## ALTERNATIVE 1 - CALTRANS RETROFIT PROPOSAL

Caltrans has prepared a proposal to retrofit the Central Freeway from Mission Street to the Fell and Oak ramps. The Central Freeway is composed of two different major structure segments. Between

the James Lick Freeway and Mission Street the single level structure was constructed of steel, whereas between Mission Street and the Fell/Oak ramps the two-level structure is reinforced concrete. Retrofit improvements are planned for the steel structure segment beginning at the end of 1995, however, the major retrofit effort focuses on the reinforced concrete section.

The current retrofit proposal would bring the Mission-Fell/Oak section of the freeway up to new seismic safety criteria, which were developed by Caltrans with advice from the California Earthquake Advisory Board. The current retrofit project would go beyond mere repair by strengthening the existing viaducts to the current seismic design criteria, thereby providing a much higher resistance to future earthquakes than a simple repair of damaged columns. The strengthening would prevent collapse and significantly reduce major damage to keep these structures in service in the event of a maximum credible earthquake.

The retrofit design has been tested at UC Berkeley and UC San Diego and approved by an independent peer review panel. The basic approach to the retrofit is to replace the outer five and six foot rectangular columns with new six or seven foot diameter round columns. The existing bent caps and footings would be strengthened and any inner columns would be jacketed with an elliptical structural steel shell.

The outside columns would be replaced by temporarily shoring the bridge structure, removing the existing column, and constructing the new column while maintaining traffic on the temporarily shored bridge. The shoring is designed to carry all of the applied loads and only one column in a structural frame, approximately 300 feet long, would he removed at any given time. Two lanes are planned to be maintained in each direction every day, however, there would need to be some lane closures at night. In general, one lane would remain open at night, although there would be occasions when the entire viaduct would need to be closed. This construction strategy assumes some night time construction activity which would impact nearby residential areas.

The two freeway stubs (the Gough/Franklin stub and the Panhandle Freeway stub near Market Street) would be removed as part of the retrofit project. The present high two-level structure would otherwise remain basically unchanged, except for the larger support columns and "jacketed" inner columns.

From a traffic perspective, the retrofit proposal would provide the same connections to local streets as are present today (see figure for circulation plan).

## ALTERNATIVE 2 - SINGLE DECK HYBRID CONCEPT

Alternative 2 attempts to minimize the required construction closure time for the Central Freeway and, at the same time, improve freeway connections to the Gough/Franklin corridor. Its single deck

would also decrease view blockages. Several concepts are presently being explored for the freeway itself as well as connections to the local street system. In general, these concepts would involve replacing the double deck freeway structure between Mission Street and Fell Street with a single deck six-lane elevated roadway. The freeway would cross Market Street probably at the level of the present lower deck (35 feet) and would continue as a single deck low-level elevated freeway along the present alignment to Oak Street. At Oak Street the elevated Oak and Fell ramps would swing over to end at Laguna Street similar to the present configuration. The possibility exists to add ramp connections to the Gough/Franklin corridor in addition to the Oak/Fell corridor ramps. See figure for circulation plan.

## ALTERNATIVE 3 - LOW SINGLE DECK FREEWAY DEPRESSED NORTH OF MARKET STREET

Alternative 3, like Alternative 2, provides a single deck crossing of Market Street, but unlike Alternative 2 it descends underground after crossing Market Street and surfaces again near Oak Street. Because Alternative 2 goes under Haight and Page Streets, it can cross Market Street at a lower level. It avoids elevated freeway structures along Octavia Street, but would require tunnel portals. One tunnel portal would be between Market and Haight Streets. A second portal would be located between Page and Oak Streets and the third portal would be located within the block bounded by Oak, Fell, Octavia and Laguna Streets. This tunnel portal between Oak and Fell Streets would be roughly in the same diagonal alignment where the present elevated Fell Street ramp is located. Between Mission and Valencia Streets, Alternative 3's elevated freeway would have about a 3.5 percent grade, and would be about midway between the elevations of the present Central Freeway lower and upper decks. Between Valencia and Market Streets the freeway would level off, clearing Valencia Street about 35 feet above grade and clearing Market Street about 17 feet above grade. Thus, the freeway would cross Market Street about 15 feet lower than the present lower deck of the Central Freeway and lower than Alternative 2's crossing. Between Market Street and Haight Street, the freeway would transition on a seven percent grade from an elevated freeway to a depressed underground freeway by using the 18-foot grade differential between Market and Haight Streets (Haight Street is on top of a hill). The freeway would level-off at Page Street and then rise at about an eight percent grade to surface at Oak Street. A separate branch for northbound Fell Street off-ramp traffic would diverge from the main tunnel at Rose Street and continue deeper down until Lily Street, where it would rise at an eight to nine percent grade to the Laguna/Fell Street intersection. Both the Oak (Franklin) and Fell Street off-ramps would be on steep eight to nine percent upgrades. While this would help to slow exit traffic, it would also increases acceleration time for vehicles stopped at traffic signals. Neither off-ramp is envisioned to serve high percentages of trucks, which would be signed to exit the freeway at Mission Street.

Octavia Street would be converted to a one-way southbound street between Fell and Page Streets with the segment between Page and Market Streets remaining two-way. The one-way segment of

Octavia Street would minimize traffic conflicts and, thereby, would increase intersection traffic capacity at the Fell Street and Oak Street intersections to better serve on-ramp traffic coming from Gough Street.

By going underground, the east-west Haight Street and Page Street connections would remain open to traffic. The area between Haight and Page Streets directly over the underground Central Freeway conceivably could be used for other purposes such as housing or open space.

## ALTERNATIVE 4 - DEEP TUNNEL UNDER MUNI METRO

Alternative 4 (see figure) would have similar traffic connections as Alternative 3, but would route the Central Freeway beneath Market Street rather than crossing above it at a low level. The proposed vertical alignment is to descent at a six percent grade after crossing above Mission Street and pass under the MUNI Metro tunnel. The Central Freeway would rise at an eight percent grade to surface at Oak Street. Alternative 4 would require tunnel portals for the Central Freeway between:

- Duboce and Valencia Streets;
- Page and Oak Streets; and
- Oak, Fell, Octavia and Laguna Streets.

Duboce Street in the westbound direction would be closed to allow the Central Freeway to come to grade.

## ALTERNATIVE 5 - FREEWAY TRAFFIC ACCESS DISPERSAL

Alternative 5 represents Task Force Concept "C" which segregates Bay Bridge (I-80) and Peninsula (US-101) freeway traffic exiting onto San Francisco surface streets in the study area. The operational direction of several streets would also be changed to better distribute freeway traffic crossing Market Street.

These new freeway facilities would be complemented by a system of operational changes to the surface street system, most notably reversing the direction of Eighth, Ninth and Tenth Streets. The intent of these changes would be to directly route traffic to/from the freeway and to more uniformly distribute freeway traffic crossing Market Street.

Principal surface street changes would include:

- Converting Seventh Street to two-way operation (presently one-way southbound) from Market Street to Harrison Street;
- Reversing the direction of Eighth and Tenth Streets to northbound flow (presently one-way southbound) from Market Street to Division Street;
- Reversing the direction of Ninth Street to southbound operation (presently one-way northbound) from Division Street to Market Street;
- Reversing the direction of Larkin Street to southbound operation from California Street to Market Street;
- Reversing the direction of Hyde Street to northbound operation from Market Street to California Street;
- Reversing the six-block segment of Polk Street from Market Street to Turk Street to northbound operation;
- Converting Leavenworth Street to two-way operation from McAllister to California Streets;
- Converting the two-block segment of Howard Street to two-way operation between Ninth and Eleventh Streets;
- Reconstructing Octavia Street to a four-lane boulevard with two-lanes of traffic in each direction separated by a landscaped traffic median;
- Converting Mission Street between Duboce Avenue and South Van Ness Avenue to a two-way street; and
- Converting one block of Harrison Street between Ninth and Tenth Streets to two-way flow.

The reversal of Ninth and Tenth Streets would require reversing the US-101 on- and off-ramps at Ninth and Tenth Streets as well. This would require a "flyover" for the off-ramp which would descend on to Tenth Street between Bryant and Harrison Streets.

Physically, the Central Freeway would end at Market Street opposite from Octavia Street within the present alignment of the elevated freeway. Functionally, the Central Freeway would be replaced by

a system of on- and off-ramps and would cease to operate as a mainline high speed freeway. Traffic northbound on US-101 (James Lick Freeway) would exit this freeway via the present two-lane connector ramp to the Central Freeway with the right-most lane directed to a Tenth Street off-ramp and the left-most lane directed to a new South Van Ness Avenue (US-101 North/Golden Gate Bridge) off-ramp. Traffic westbound from the Bay Bridge (I-80) would exit via: the present Eighth Street off-ramp; via the Mission Street off-ramp; or via the Central Freeway ramp terminus at Market Street. The Eighth Street off-ramp would be signed as the main US-101 route to the Golden Gate Bridge and the Mission Street off-ramp would be signed the truck route. On-ramps would be provided at: Market Street, Otis Street; and South Van Ness Avenue. Traffic from the Civic Center and South of Market area would be encouraged to use the Ninth Street and Harrison (Eighth Street) on-ramps.

In order to provide the new Otis Street elevated on-ramp merge to the southbound Central Freeway, the northbound Central Freeway lanes would need to be elevated 20 to 25 feet above the southbound Central Freeway lanes. About 400 feet of the northbound freeway on each side of Mission Street would be at a different elevation (double deck) than the southbound freeway, perhaps requiring complete reconstruction of the freeway segment between Mission Street and I-80.

## ALTERNATIVE 6 - VAN NESS AVENUE AND GOUGH/FRANKLIN CORRIDOR DIRECT RAMP

Alternative 6 represents Task Force Concept "E" which terminates the freeway at Market Street and provides new, more direct ramps to/from the Van Ness Avenue and Gough/Franklin corridor. Physically, the Central Freeway would fork into two elevated branches above South Van Ness Avenue with one branch serving the Oak/Fell, Upper Market Street and Mission Street corridor (referred to as Valencia Street branch) and the second branch serving the Van Ness Avenue and Gough/Franklin Street corridors.

The Valencia Street exit branch would serve traffic destined for Upper Market Street, the Mission District and the Oak/Fell Streets corridor. After exiting onto Valencia Street, traffic bound for the Oak/Fell Streets corridor would continue across Market Street on an expanded four-lane Octavia Street. Traffic bound for the Mission District would use the new Valencia Street off-ramp and turn left onto southbound Valencia Street. Traffic bound for Upper Market Street would exit at Valencia Street and turn right onto Duboce Avenue.

The Van Ness Avenue exit branch would serve northbound Central Freeway traffic bound for Van Ness Avenue or Franklin Street. The Van Ness Avenue exit branch would split away from the Valencia Street exit branch as the Central Freeway crosses over South Van Ness Avenue. About 600 feet downstream from this fork, the off-ramp would branch again into a South Van Ness Avenue ramp and a Franklin Street ramp. The South Van Ness Avenue ramp would come down to grade

near the Mission Street intersection. The Franklin Street elevated off-ramp would come down to grade at Market Street after passing over Otis and Mission Streets.

Traffic from Upper Market Street and the Oak/Fell Corridor would access the freeway system via a new on-ramp just south of Market Street within the existing Central Freeway right of way. Mission District and Van Ness Avenue corridor traffic would access the freeway via a new on-ramp from South Van Ness Avenue. The new South Van Ness Avenue on-ramp would originate south of the Mission Street intersection and would ascend and crossover surface street traffic. The on-ramp would then merge into the elevated southbound Central Freeway. In order to facilitate this elevated ramp merge with the southbound lanes of the Central Freeway, the northbound Central Freeway lanes would need to be 20 to 25 feet higher than the southbound lanes. Thus, the Central Freeway would be a double deck facility near South Van Ness Avenue and the present single deck section of the Central Freeway between I-80 and Mission Street would also need to be included in the freeway reconstruction. The present South Van Ness Avenue loop on-ramp would be closed.

Gough Street corridor traffic destined for the Central Freeway would continue south across Market Street to Otis Street and would enter the Central Freeway via a new Otis Street on-ramp located near Duboce Avenue. The new Otis Street flyover on-ramp would originate between South Gough Street and Duboce Avenue, and crossover surface traffic on Mission Street before merging with the elevated Central Freeway. In order to accommodate this new elevated on-ramp, the northbound lanes of the Central Freeway would need to be double decked above the southbound lanes.

Complementing surface street changes would include:

- Conversion of Mission Street to two-way operation between Duboce and South Van Ness Avenue;
- Conversion of South Gough Street to a one-way southbound street;
- Closure of McCoppin Street between Market and Valencia Streets; and
- Development of Octavia Street a four-lane boulevard with a landscaped median.

## ALTERNATIVE 7 - TENTH STREET TUNNEL

Alternative 7 would terminate the Central Freeway at Market Street and would provide a 2,500-foot tunnel starting on Fell Street just west of Van Ness Avenue and ending on Tenth Street just south

of Howard Street.[1] The tunnel crossing of Market Street at Tenth Street is the furthest west that a shallow tunnel could be squeezed in above the MUNI Metro tunnel. West of Tenth Street, MUNI Metro's tunnel is too near the surface of Market Street and a Central Freeway tunnel would need to be routed deep under MUNI Metro. The Tenth Street tunnel would provide a quicker link to the Tenth Street freeway ramp and would attempt to divert Gough Street freeway traffic away from the new Octavia Street ramp and lessen the capacity impacts of traffic crossing Market Street.

Key elements of this alternative are:

- The Central Freeway would terminate at Market Street. The existing single deck freeway south (east) of Mission Street would be extended as a single deck freeway and brought down to grade at Market Street;
- Octavia Street would be widen to a six-lane boulevard between Market and Fell Streets;
- Mission Street off-ramp would be retained and widen to three lanes;
- South Van Ness Avenue loop on-ramp would be retained and widened to two lanes;
- Octavia Street between Market and Fell Streets would be widened to a four-lane boulevard with a landscaped median to line up with the Central Freeway at Market Street;
- A new at-grade three-lane northbound one-way street connection would be constructed extending Franklin Street to Mission Street;
- Southbound South Van Ness Avenue would be depressed under Mission Street to eliminate traffic conflicts to/from the freeway;
- A two-lane southbound tunnel under Fell and Tenth Streets would be constructed between Van Ness Avenue to Howard Street;
- McCoppin Street would be closed west of Valencia Street; and
- The Harrison Street right-turn onto Ninth Street would be channelized to provide a free right-turn movement.

[1] As a point of comparison, the Broadway Tunnel is about 2,300 feet in length.

WSA
CENTRAL FREEWAY
DOUBLE-DECK RETROFIT
ALTERNATIVE 1
DOUBLE-DECK RETROFIT
NORTH
LEGEND
Traffic Signal
FINALUB-W DET-10/31/95G
GROVE ST
HAYES ST
FELL ST
OAK ST
PAGE ST
HAIGHT ST
DUBOCE AVE
DOLORES ST
14TH ST
GUERRERO ST
VALENCIA ST
MISSION ST
SOUTH VAN NESS
OTIS ST
12TH ST
11TH ST
10TH ST
9TH ST
8TH ST
MISSION ST
HOWARD ST
FOLSOM ST
MARKET ST
HYDE ST
LARKIN ST
POLK ST
VAN NESS AVE
FRANKLIN ST
GOUGH ST
OCTAVIA ST
LAGUNA ST

# Alternatives Analysis
# Central Freeway Study

CA 280 CENTRAL FREEWAY
WSA
ALTERNATIVE 3
LOW DECK OVER MARKET
CUT AND COVER TUNNEL
LEGEND
Traffic Signal
NORTH
FINAL-B-W DET-10/31/95C
GROVE ST
HAYES ST
FELL ST
OAK ST
PAGE ST
HAIGHT ST
OCTAVIA ST
LAGUNA ST
GOUGH ST
FRANKLIN ST
VAN NESS AVE
POLK ST
LARKIN ST
HYDE ST
MARKET ST
8TH ST
MISSION ST
HOWARD ST
FOLSOM ST
9TH ST
10TH ST
11TH ST
12TH ST
OTIS ST
SOUTH VAN NESS
MISSION ST
VALENCIA ST
GUERRERO ST
DOLORES ST
14TH ST
DUBOCE AVE

VSA
Stockton Tunnel Study
Central Freeway
ALTERNATIVE 4
DEEP TUNNEL UNDER MARKET
BORE TUNNEL
LEGEND
Traffic Signal
NORTH
FINALLB-W_DET-10/31/95C
GROVE ST
HAYES ST
FELL ST
OAK ST
PAGE ST
HAIGHT ST
DUBOCE AVE
LAGUNA ST
OCTAVIA ST
GOUGH ST
FRANKLIN ST
VAN NESS AVE
POLK ST
LARKIN ST
HYDE ST
MARKET ST
DOLORES ST
14TH ST
GUERRERO ST
VALENCIA ST
MISSION ST
SOUTH VAN NESS
OTIS ST
12TH ST
11TH ST
10TH ST
9TH ST
8TH ST
MISSION ST
HOWARD ST
FOLSOM ST


TURK ST
GOLDEN GATE AVE
McALLISTER ST
FULTON ST
GROVE ST
HAYES ST
FELL ST
OAK ST
PAGE ST
HAIGHT ST
DUBOCE AVE
14TH ST
15TH ST
16TH ST
LAGUNA ST
OCTAVIA ST
BUCHANAN ST
GOUGH ST
FRANKLIN ST
VAN NESS AVE
POLK ST
LARKIN ST
HYDE ST
LEAVENWORTH ST
MARKET ST
9TH ST
MISSION ST
7TH ST
HOWARD ST
8TH ST
FOLSOM ST
9TH ST
10TH ST
HARRISON ST
11TH ST
BRYANT ST
OTIS ST
12TH ST
13TH ST
BRANNAN ST
DOLORES ST
GUERRERO ST
VALENCIA ST
MISSION ST
SOUTH VAN NESS
POTRERO AVE
80
280
101
LEGEND
Traffic Signal
NORTH
ALTERNATIVE 5
FREEWAY TRAFFIC ACCESS DISPERSAL
FINAL\BW_5-9-10/30/95C
WSA
Alternative Study
CENTRAL FREEWAY

# Alternative 6 Direct Ramp to South Van Ness

Alternatives Analysis
Geary Transit Study
VSA
ALTERNATIVE 7
TENTH STREET TUNNEL
B-W-7/25/95C
NORTH
TURK ST
GOLDEN GATE AVE
McALLISTER ST
FULTON ST
GROVE ST
HAYES ST
FELL ST
OAK ST
PAGE ST
HAIGHT ST
DUBOCE AVE
14TH ST
15TH ST
16TH ST
DOLORES ST
GUERRERO ST
VALENCIA ST
MISSION ST
SOUTH VAN NESS
POTRERO AVE
OTIS ST
UNDERPASS
13TH ST
12TH ST
11TH ST
10TH ST
9TH ST
8TH ST
7TH ST
MARKET ST
LEAVENWORTH ST
HYDE ST
LARKIN ST
POLK ST
VAN NESS AVE
FRANKLIN ST
GOUGH ST
OCTAVIA ST
LAGUNA ST
BUCHANAN ST
MISSION ST
HOWARD ST
FOLSOM ST
HARRISON ST
BRYANT ST
BRANNAN ST
80
101
280

# TECHNICAL MEMORANDUM #6

## Traffic Operations

# Central Freeway

# AREAWIDE TRAFFIC STUDY

prepared for

SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

**DEPARTMENT OF PARKING & TRAFFIC**
**CITY AND COUNTY OF SAN FRANCISCO**

WSA

**WILBUR SMITH ASSOCIATES**

Revised: November 1995

# TRAFFIC OPERATIONS

## INTRODUCTION

Traffic analysis is a key to evaluating the various alternatives proposed for the Central Freeway corridor. An important requirement for any solution is its ability to adequately accommodate traffic in the corridor while enhancing the quality of life in adjacent neighborhoods.

This technical memorandum summarizes the methodology and results of the traffic analysis for Central Freeway alternatives. It uses a traffic simulation model (CORFLO, developed for the Federal Highway Administration) as well as other traffic planning tools to analyze the complex interactions between freeway links, ramps and surface streets in the study area.

The following factors are noted as a preface to the analysis:

1. Data are tabulated for five conditions covering seven project alternatives as follows:

   **Base Case:** Covers the existing conditions as well as Alternative 1 (Double-Deck Retrofit) and Alternative 2 ("Hybrid" Single-Deck Retrofit) assuming that the Oak-Fell ramps are unchanged for these alternatives;

   **Alternative 3:** Covers Alternative 3 (Low-Deck) and Alternative 4 (Deep Tunnel);

   **Alternative 5:** Covers Alternative 5 (Freeway Traffic Dispersal/Surface Street Reversal);

   **Alternative 6:** Covers Alternative 6 (South Van Ness Corridor Direct Ramps); and

   **Alternative 8:** Covers Alternative 8 (South of Market Street Refinement).

   No traffic analysis was done for Alternative 7, the Tenth Street Tunnel or Alternative 9, the Otis/Duboce terminus.

2. Current traffic volumes were used in the recognition that the study area is a development-mature area with traffic capacity limitations caused by the major bridges feeding traffic into and out of the study area. Traffic is unlikely to increase or decrease significantly in the foreseeable future within the study area. This assumption is consistent with assumptions in the Metropolitan Transportation Commission (MTC) model.

3. For non-Base Case runs of the model, the consultant has made some changes to improve traffic flow where it appeared warranted. Further changes to the street network would improve overall traffic performance but would probably have little affect on relative comparisons between the alternatives.

## DESCRIPTION OF THE CORFLO MODEL

CORFLO is a computer model designed to model traffic performance measures, such as vehicular flow rate, density and speed. Capacity restraint and speed-density equations are used to model travel behavior on freeway and surface streets. Traffic is assigned paths through the street network based on minimum travel time routes. The model constantly adjusts travel speed on individual street segments as traffic volumes begin to reach the capacity of the streets. The adjustments to speed and to volume assignments consider traffic signal timings, pedestrian and bus impacts on capacity as well as intersection turning movements. Guide signage are not reflected in the assignment process.

Traffic demand distribution (i.e., origin-destination patterns) are an input to the CORFLO model. The two integrated model components of CORFLO used in this study are FREEFLO and NETFLO2. FREEFLO models traffic behavior on freeways and ramps. NETFLO2 models traffic behavior on surface streets. CORFLO performs a two step process: (1) traffic assignment to generate travel times and travel paths; and (2) traffic simulation to generate vehicle speed and density. This study focuses on analyzing traffic conditions during a typical weekday PM peak period (4-6 PM). Model outputs include: traffic volumes on individual street segments, intersection turning movements, travel speed, and traffic density (vehicles per lane-mile). The latter is used to describe areas of congestion.

### Central Freeway Network

The Central Freeway network is roughly bounded on the north by McAllister Street; on the south by Fourteenth and Bryant Streets; on the east by Seventh Street; and on the west by Laguna and Guerrero Streets. Market Street runs diagonally through the study area and roughly bisects it into two halves. The model network includes all freeway mainline, connectors and ramps, all major surface streets and some minor streets.

Origin-destination patterns of motorists using study area streets were defined based on travel patterns estimated by MTC's regional traffic model calibrated to ground counts of traffic measured entering and leaving the study area at its 46 entry and exit street gateways. These link volumes served as "control total" for all trips entering and exiting the study area. MTC trip data were used to develop the percent trip distribution from all origins to all destinations for both internal and cordon traffic zones. In order to provide an overview of existing trip distribution patterns in the

study area, all 49 traffic zones in the study area were aggregated into 11 super-zones as presented in Figure 1. The existing PM peak hour traffic distribution is presented in Table 1.

Table 1

EXISTING ORIGIN-DESTINATION TRIPS (VPH)

| Origin | Destination | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Zone 1 | Zone 2 | Zone 3 | Zone 4 | Zone 5 | Zone 6 | Zone 7 | Zone 8 | Zone 9 | Zone 10 | Zone 11 | Total |
| Zone 1 | 0 | 2,694 | 84 | 868 | 22 | 858 | 112 | 0 | 102 | 166 | 70 | 4,579 |
| Zone 2 | 3,267 | 0 | 0 | 1,427 | 84 | 858 | 858 | 553 | 200 | 0 | 400 | 7,645 |
| Zone 3 | 121 | 66 | 67 | 70 | 115 | 238 | 70 | 74 | 238 | 318 | 63 | 1,358 |
| Zone 4 | 631 | 879 | 60 | 749 | 74 | 373 | 20 | 461 | 68 | 74 | 136 | 3,511 |
| Zone 5 | 49 | 91 | 70 | 146 | 336 | 70 | 60 | 39 | 60 | 70 | 0 | 951 |
| Zone 6 | 369 | 793 | 824 | 153 | 60 | 0 | 0 | 63 | 197 | 1,381 | 70 | 3,900 |
| Zone 7 | 169 | 352 | 170 | 63 | 0 | 0 | 0 | 115 | 238 | 460 | 188 | 1,760 |
| Zone 8 | 0 | 1,440 | 364 | 431 | 0 | 238 | 103 | 215 | 542 | 1,161 | 858 | 4,871 |
| Zone 9 | 312 | 398 | 85 | 160 | 0 | 823 | 304 | 1,029 | 371 | 400 | 70 | 4,014 |
| Zone 10 | 306 | 204 | 234 | 341 | 76 | 1,395 | 442 | 684 | 176 | 354 | 182 | 4,394 |
| Zone 11 | 398 | 463 | 208 | 290 | 114 | 481 | 299 | 481 | 175 | 552 | 130 | 3,591 |
| TOTAL | 5,622 | 7,380 | 2,196 | 4,674 | 867 | 4,900 | 2,167 | 3,714 | 2,372 | 4,991 | 1,691 | 40,574 |

## Traffic Assignment

CORFLO performs an "equilibrium" traffic assignment to determine the travel times and identifies travel paths from all origins to all destinations. The origin-destination trip table defines and pre-determines the total traffic volumes at all cordon and internal zones. For each origin-destination pair, the model assigns the greatest share of traffic to the travel path that has the shortest travel time. As illustrated in Figure 2, equilibrium traffic assignment allows multiple travel paths between all origins and destinations. Equilibrium is reached when no driver can reduce his travel time by choosing a new route. Other key data required for traffic assignment are free flow speed, lane configuration, channelization, link distance, grade, stop and yield signs, signal timing and vehicle composition.

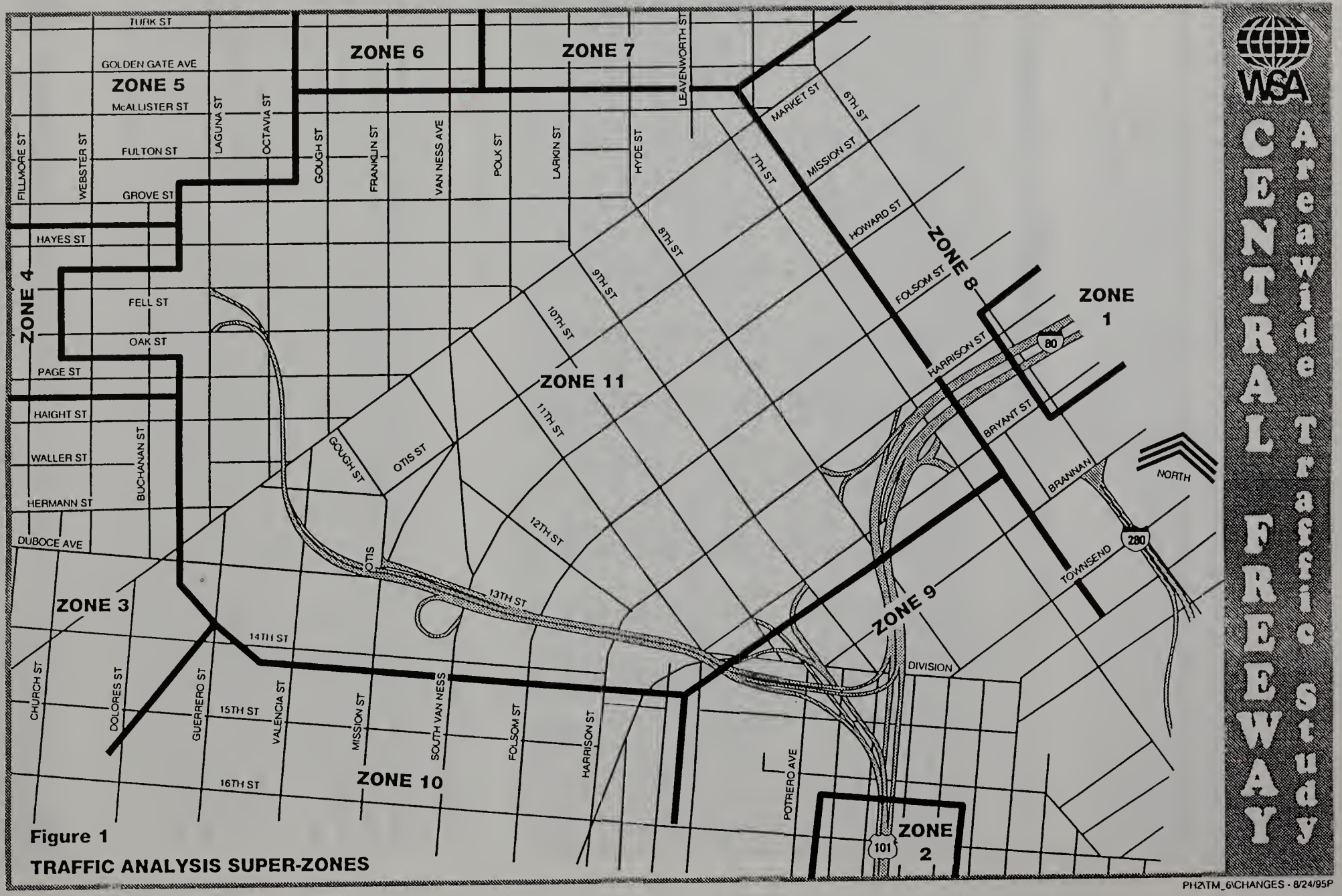



**Figure 1**

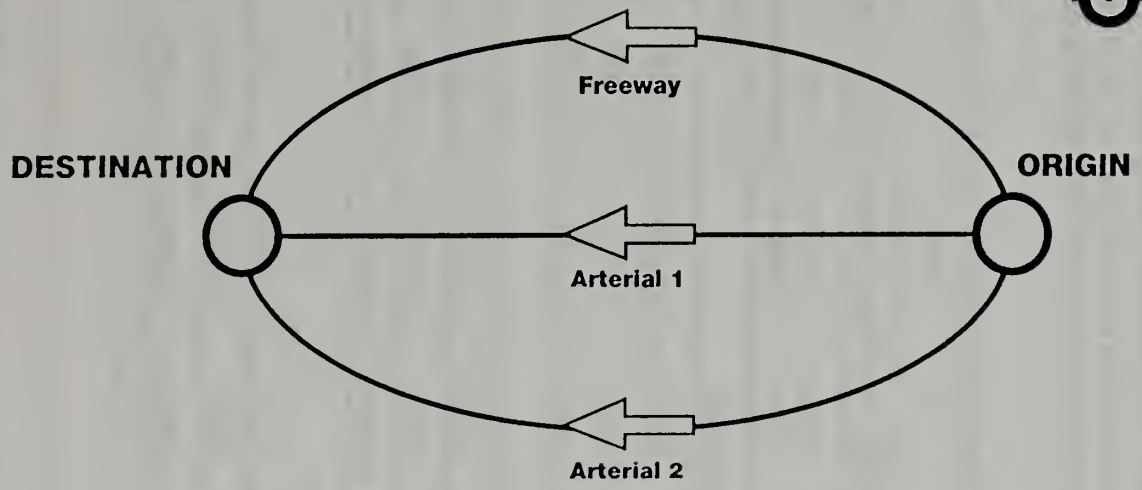
**TRAFFIC ANALYSIS SUPER-ZONES**

WSA

Areawide Traffic Study

CENTRAL FREEWAY

PH2\TM_6\CHANGES - 8/24/95P



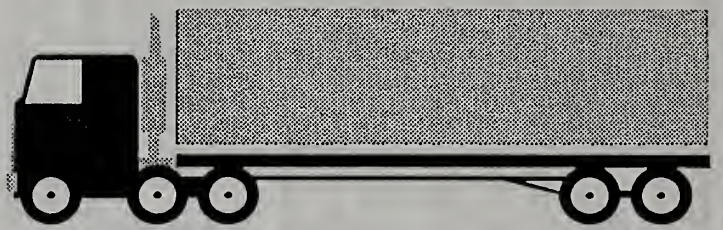



Figure 2
TRAFFIC ASSIGNMENT

CENTRAL FREEWAY Areawide Traffic Study

TM_6\TRAFASSI-8/24/95C

Under Alternatives 3, 5, 6 and 8 the existing O-D trips were reassigned to reflect changes in traffic flow patterns both inside and outside the model network. Currently, Oak and Fell Streets carry heavy peak hour traffic partially because freeway ramp connections to Franklin and Gough Streets were lost due to the Loma Prieta earthquake. In addition, it may be desirable to encourage more traffic to use Golden Gate Avenue and Turk Streets where some excess capacity is available.

## Calibration and Validation

Calibration is the process of modifying computer parameters used in the model until the model can replicate the travel patterns exhibited in the origin-destination trip table. In this study, free flow speed was the only parameter that was modified in the calibration process.

During the validation process, screenlines were established in order to compare link volumes from model output and link volumes from existing traffic counts. The five screenlines were drawn at the following locations: Freeway On/Off Ramps, North of Market Street, South of Market Street, West of Van Ness Avenue, and East of Van Ness Avenue. As shown in Table 2, the screenline totals indicate discrepancies generally within ten percent. Overall, the model output is judged to compare closely with existing traffic counts. Therefore, the model can be considered validated for alternatives analysis.

Table 2

CORFLO MODEL PM PEAK HOUR VALIDATION SUMMARY

| Location | Actual Count | Model Output | Net Difference | Absolute* Difference | Net Percent Difference |
|---|---|---|---|---|---|
| **Freeway On/Off Ramp Screenline** | | | | | |
| On-Ramp Subtotal | 8,000 | 8,140 | 140 | 924 | 2% |
| Off-Ramp Subtotal | 7,500 | 7,471 | (29) | 829 | (0%) |
| **Screenline Total** | **15,500** | **15,611** | **111** | **1,753** | **1%** |
| **North of Market Screenline** | | | | | |
| Southbound Subtotal | 6,643 | 7,041 | 398 | 908 | 6% |
| Northbound Subtotal | 7,784 | 8,074 | 290 | 1,332 | 4% |
| **Screenline Total** | **14,427** | **15,115** | **688** | **2,240** | **5%** |
| **South of Market Screenline** | | | | | |
| Northbound Subtotal | 7,275 | 7,429 | 154 | 614 | 2% |
| Southbound Subtotal | 5,606 | 5,470 | (136) | 570 | (2%) |
| Screenline Total | 12,881 | 12,899 | 18 | 1,184 | 0% |

Table 2
(continued)
CORFLO MODEL PM PEAK HOUR VALIDATION SUMMARY

| Location | Actual Count | Model Output | Net Difference | Absolute* Difference | Net Percent Difference |
|---|---|---|---|---|---|
| **West of Van Ness and South Van Ness Screenline** | | | | | |
| Eastbound Subtotal | 4,073 | 3,550 | (523) | 699 | (13%) |
| Westbound Subtotal | 4,994 | 4,766 | (288) | 1,420 | (6%) |
| **Screenline Total** | **9,067** | **8,316** | **(751)** | **2,119** | **(8%)** |
| **East of Van Ness and South Van Ness Screenline** | | | | | |
| Westbound Subtotal | 5,159 | 4,934 | (225) | 1,949 | (4%) |
| Eastbound Subtotal | 2,581 | 2,313 | (268) | 918 | (10%) |
| **Screenline Total** | **7,740** | **7,247** | **(493)** | **2,867** | **(6%)** |

* All streets in the screenline.

## MODEL RESULTS

Outputs from the CORFLO model were reviewed from five basic perspectives:

1. Link Volume Traffic changes;
2. Market Street Screenline Volume changes;
3. Queuing on the Central Freeway;
4. Average speeds on this freeway and on surface streets; and
5. Capacity impacts on selected key intersections.

### Link Volume Traffic Changes

The five project alternatives would redirect traffic flows in substantially different ways. Figures 3, 4, 5, 6 and 7 present the CORFLO model forecast PM peak hour traffic volumes for the study area freeway network. This network includes the I-80 Seventh Street ramps on the northeast, the branching of Central Freeway connector ramps from the James Lick Freeway on the south and the "Oak/Fell ramps" Central Freeway on the west.

A comparison of CORFLO model forecasts for Alternative 3 (Low Deck) to Alternative 1 (Base Case) indicates that about 750 more peak hour vehicles would be attracted to the Central Freeway crossing Market Street. Under Alternative 3 more traffic would be attracted to the Gough/Franklin corridor and away from the Oak/Fell corridor. Under Alternative 3 traffic using Seventh, Eighth,

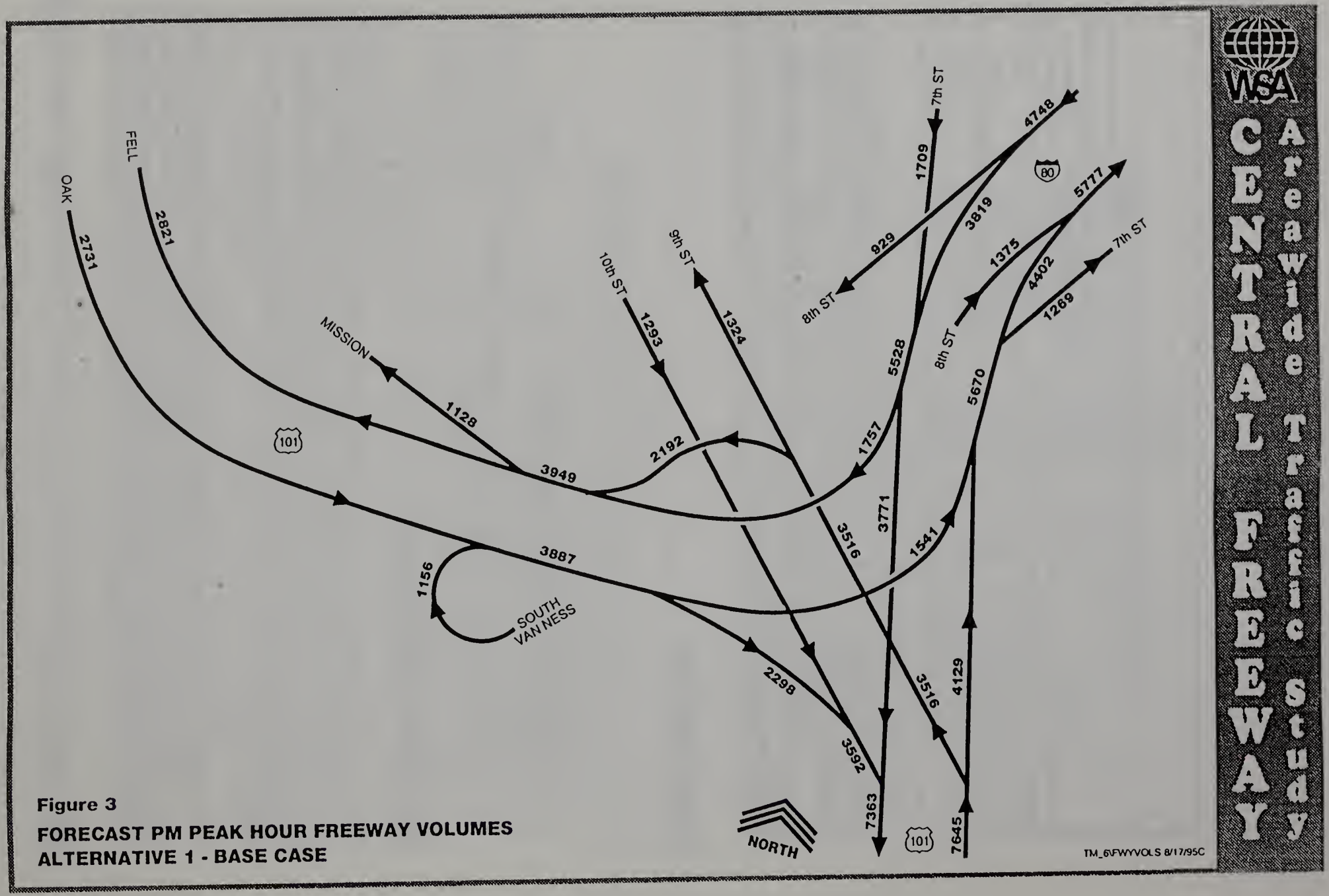



**Figure 3**
**FORECAST PM PEAK HOUR FREEWAY VOLUMES**
**ALTERNATIVE 1 - BASE CASE**

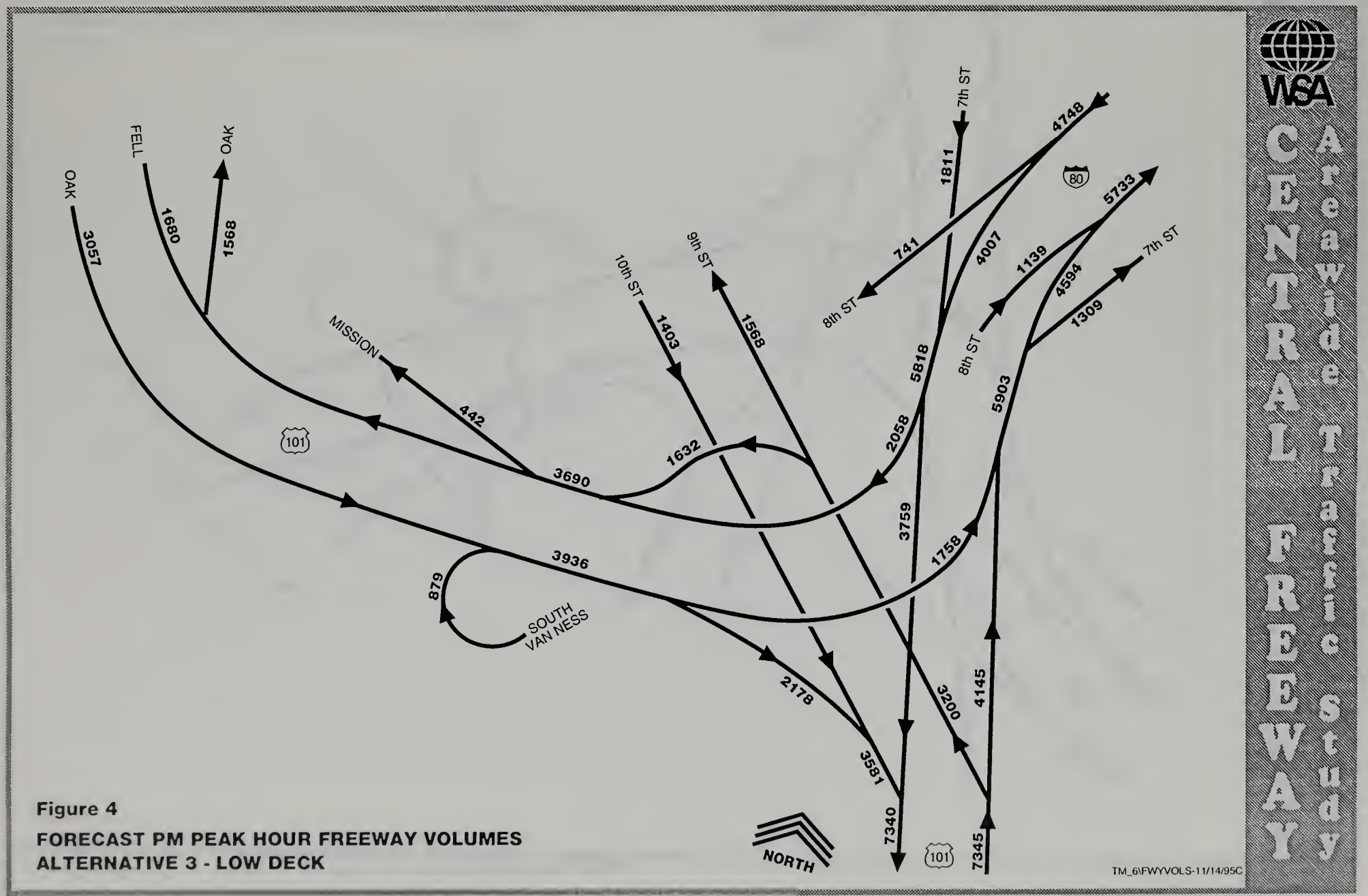



**Figure 4**

**FORECAST PM PEAK HOUR FREEWAY VOLUMES**
**ALTERNATIVE 3 - LOW DECK**

TM_6\FWYVOLS-11/14/95C

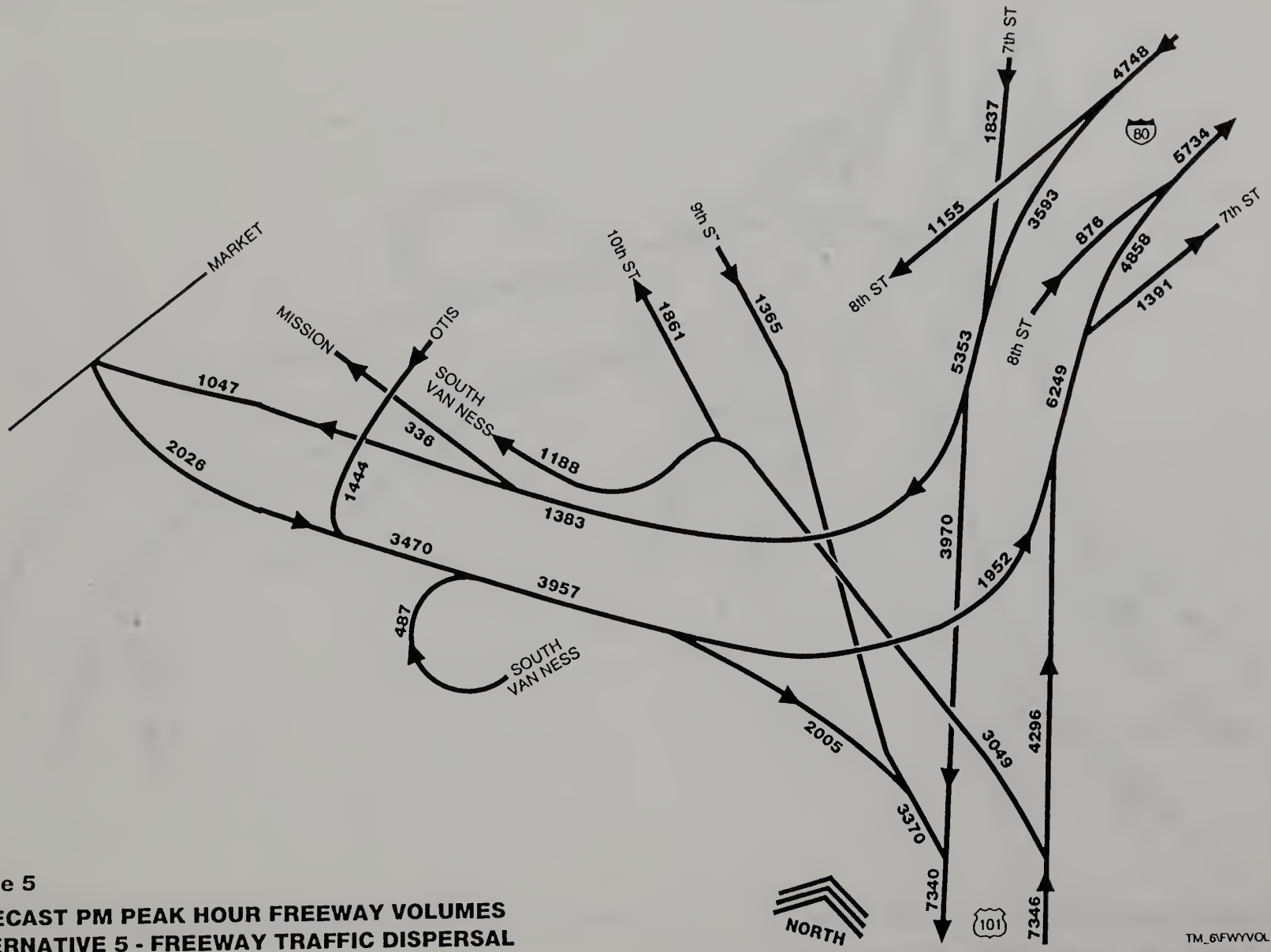



**Figure 5**
**FORECAST PM PEAK HOUR FREEWAY VOLUMES**
**ALTERNATIVE 5 - FREEWAY TRAFFIC DISPERSAL**

TM_6\FWYVOLS-8/23/95C

CENTRAL FREEWAY Areawide Traffic Study

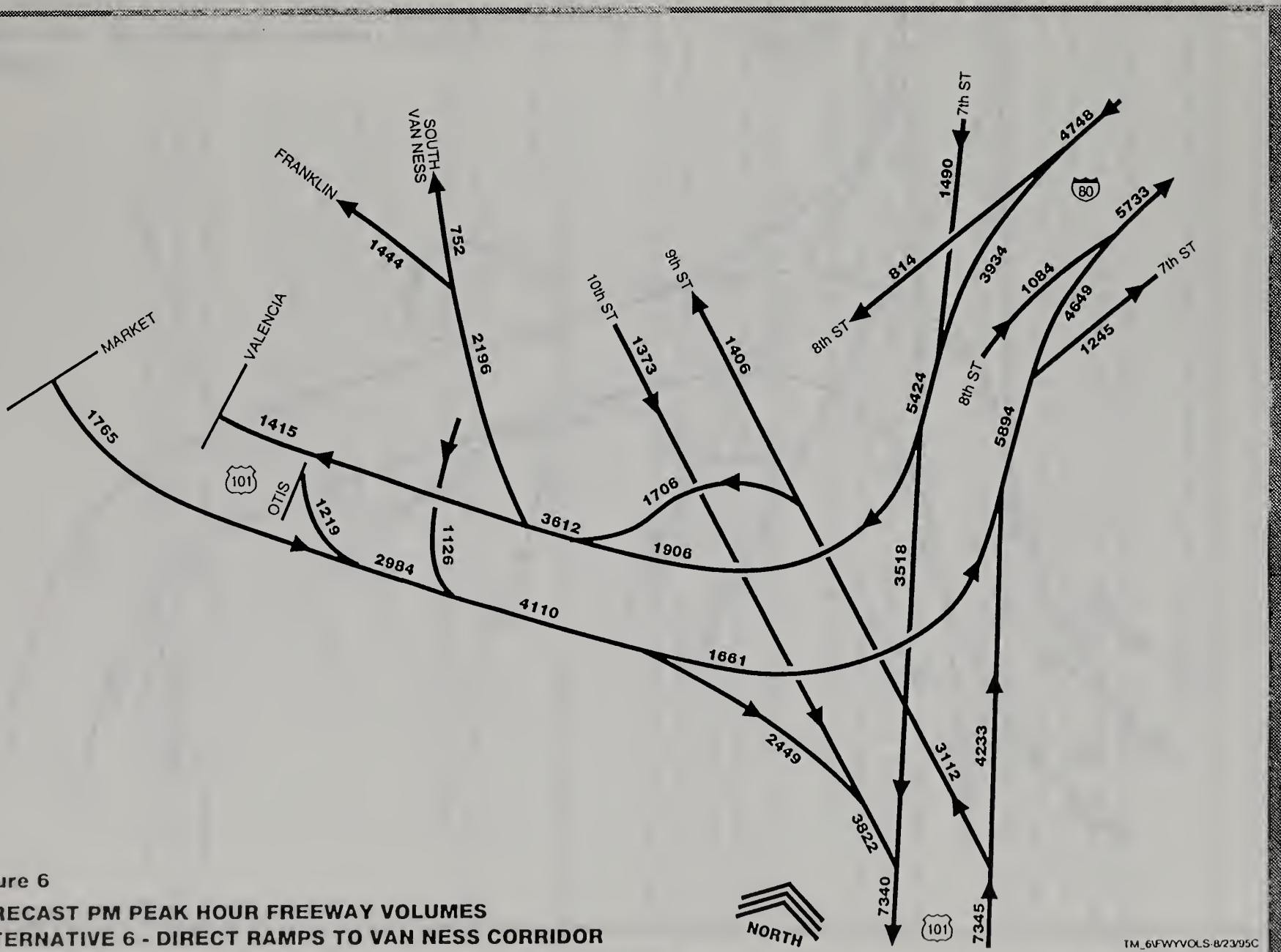



Figure 6

**FORECAST PM PEAK HOUR FREEWAY VOLUMES**
**ALTERNATIVE 6 - DIRECT RAMPS TO VAN NESS CORRIDOR**

TM_6\FWYVOLS-8/23/95C

WSA

Areawide Traffic Study

CENTRAL FREEWAY

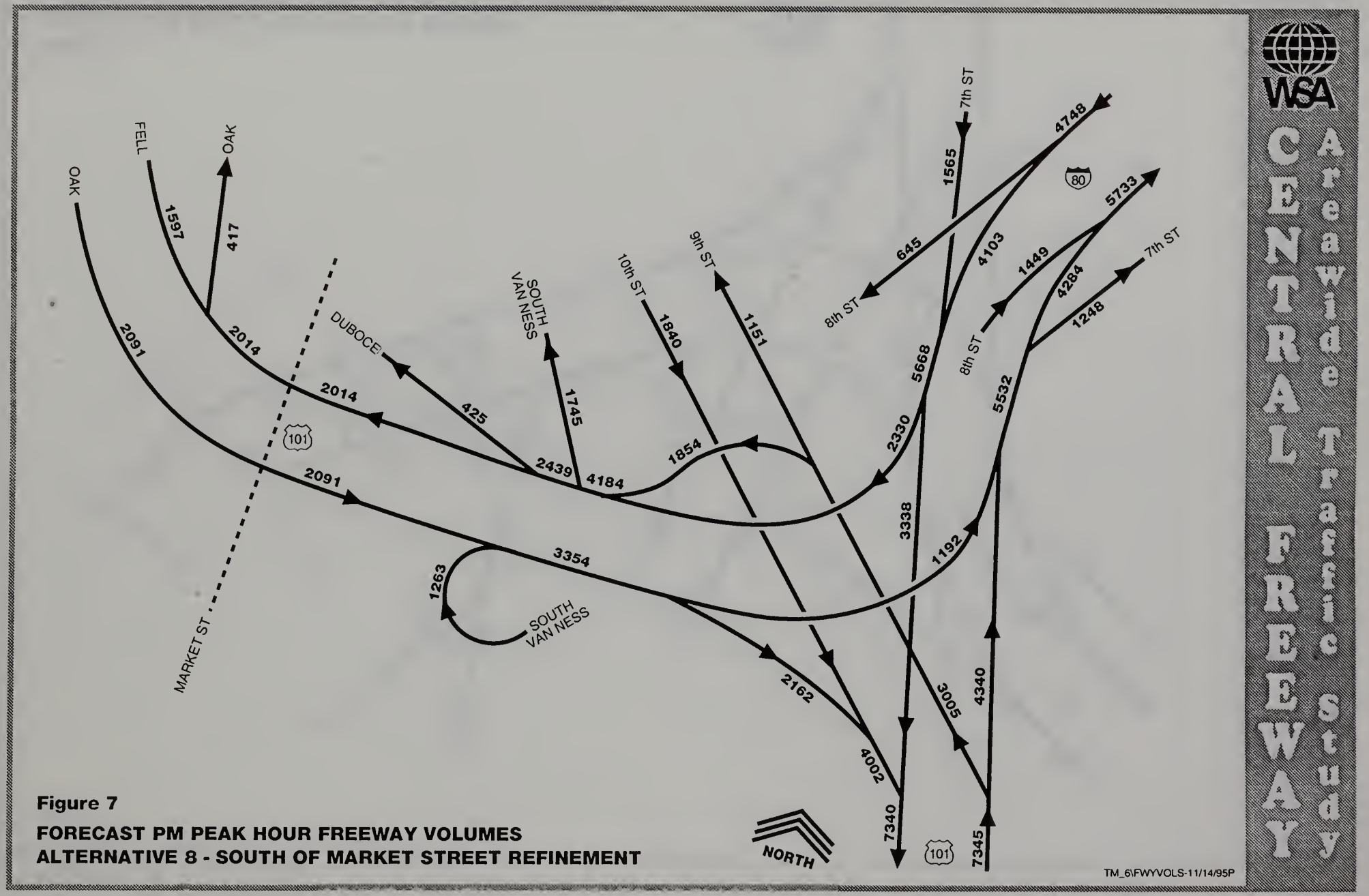



**Figure 7**

**FORECAST PM PEAK HOUR FREEWAY VOLUMES**
**ALTERNATIVE 8 - SOUTH OF MARKET STREET REFINEMENT**

Ninth and Tenth Street ramps would increase slightly, while traffic using the South Van Ness Avenue on-ramp and the Mission Street off-ramp would drop under Alternative 3.

Comparing Alternative 5 (Freeway Traffic Dispersal) to the Base Case indicates that traffic volumes would increase on the Tenth Street off-ramp and on the new South Van Ness Avenue off-ramp. Traffic is forecast to decrease for the Mission Street off-ramp and the South Van Ness Avenue on-ramp. About 40 percent of the Central Freeway off-ramp traffic approaching the study area on northbound Highway 101 would exit at South Van Ness Avenue and 60 percent would exit onto Tenth Street. At the present, about 40 percent of this traffic exits at Ninth Street.

Comparing Alternative 6 (Direct Van Ness Corridor Ramps) to the Base Case indicates that about 60 percent of the northbound traffic on the Central Freeway would use the new Van Ness Avenue/Franklin Street ramp. The "Octavia Street Boulevard," Otis Street and South Van Ness Avenue on-ramps would each serve about the same amount of traffic as each other.

Comparing Alternative 8 (South of Market Street Refinement) to the Base Case indicates the new ramp to South Van Ness Avenue would become the most heavily utilized off-ramp south of Market; while the new Duboce Avenue ramp would carry 425 peak hour vehicles. Eighth and Ninth Street off-ramps would also see a noticeable decrease in traffic. The Tenth Street ramp would have a traffic increase of about 50 percent; traffic on other south of Market Street on-ramps would increase slightly.

Figures 8, 9, 10, 11 and 12 present the forecast PM peak hour traffic volumes for surface streets for the four alternatives.

Figures 13, 14, 15 and 16 describe the relative changes forecast for surface street traffic compared to the CORFLO Base Case forecasts. The changes were categorized into five ranges:

- 50 percent or more reduction in PM peak hour traffic;
- 20 to 49 percent reduction in traffic volume;
- No Change (less than a 20 percent increase or reduction);
- 20 to 49 percent traffic increase; and
- More than a 50 percent traffic increase.

As would be expected, Alternative 3 (Low Deck) would add traffic to the Gough/Franklin corridor including the Oak/Fell links to this corridor. Alternatives 5 and 6 generally increase traffic volumes on surface streets all over the study network by diverting former freeway traffic onto the surface streets.

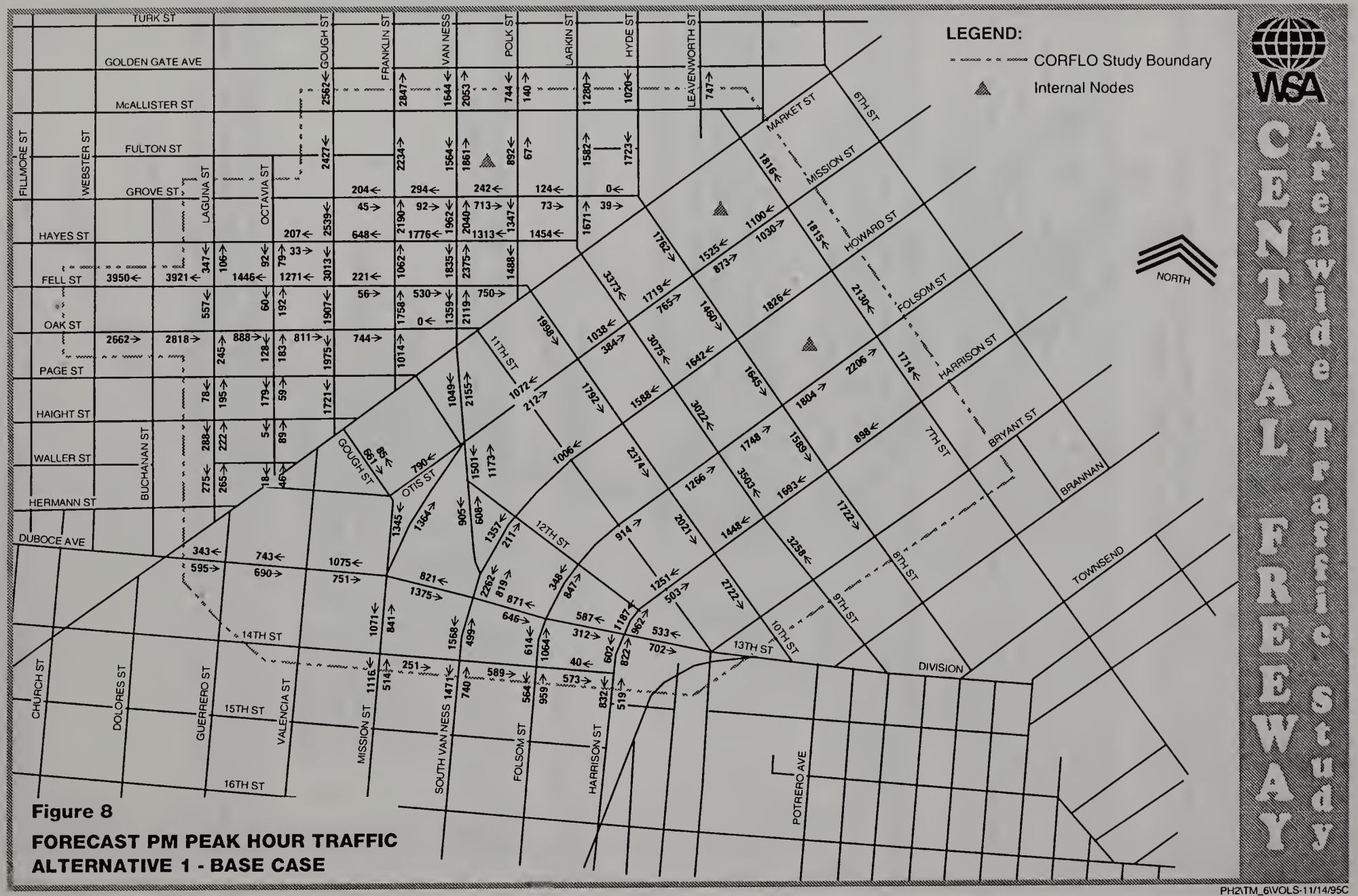



**Figure 8**

**FORECAST PM PEAK HOUR TRAFFIC**
**ALTERNATIVE 1 - BASE CASE**

WSA

Area wide Transportation Study

CENTRAL FREEWAY

PH2\TM_6\VOLS-11/14/95C

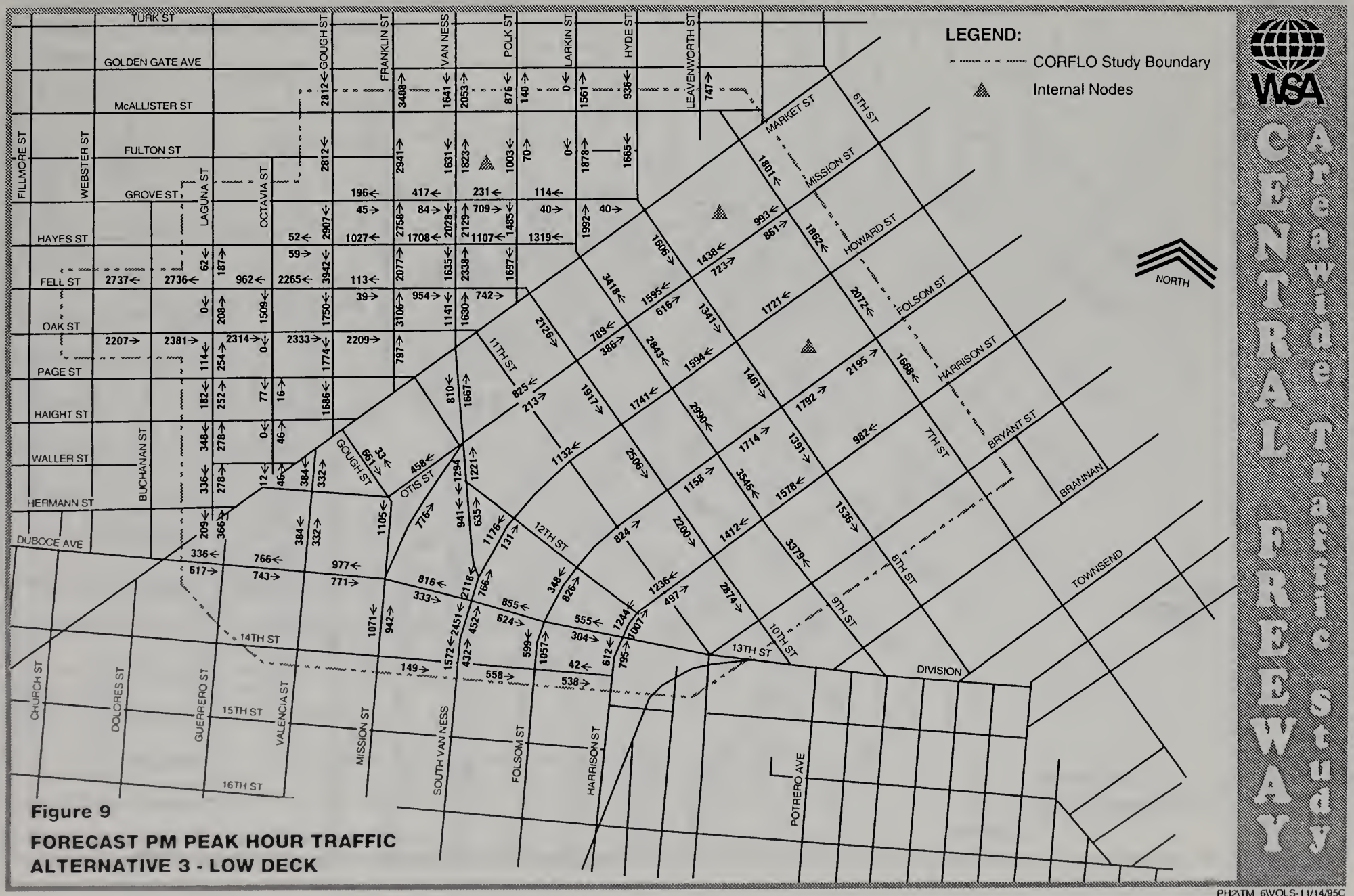



**Figure 9**

**FORECAST PM PEAK HOUR TRAFFIC**
**ALTERNATIVE 3 - LOW DECK**

WSA

CENTRAL FREEWAY

Area Wide Transportation Study

PH2\TM_6\VOLS-11/14/95C

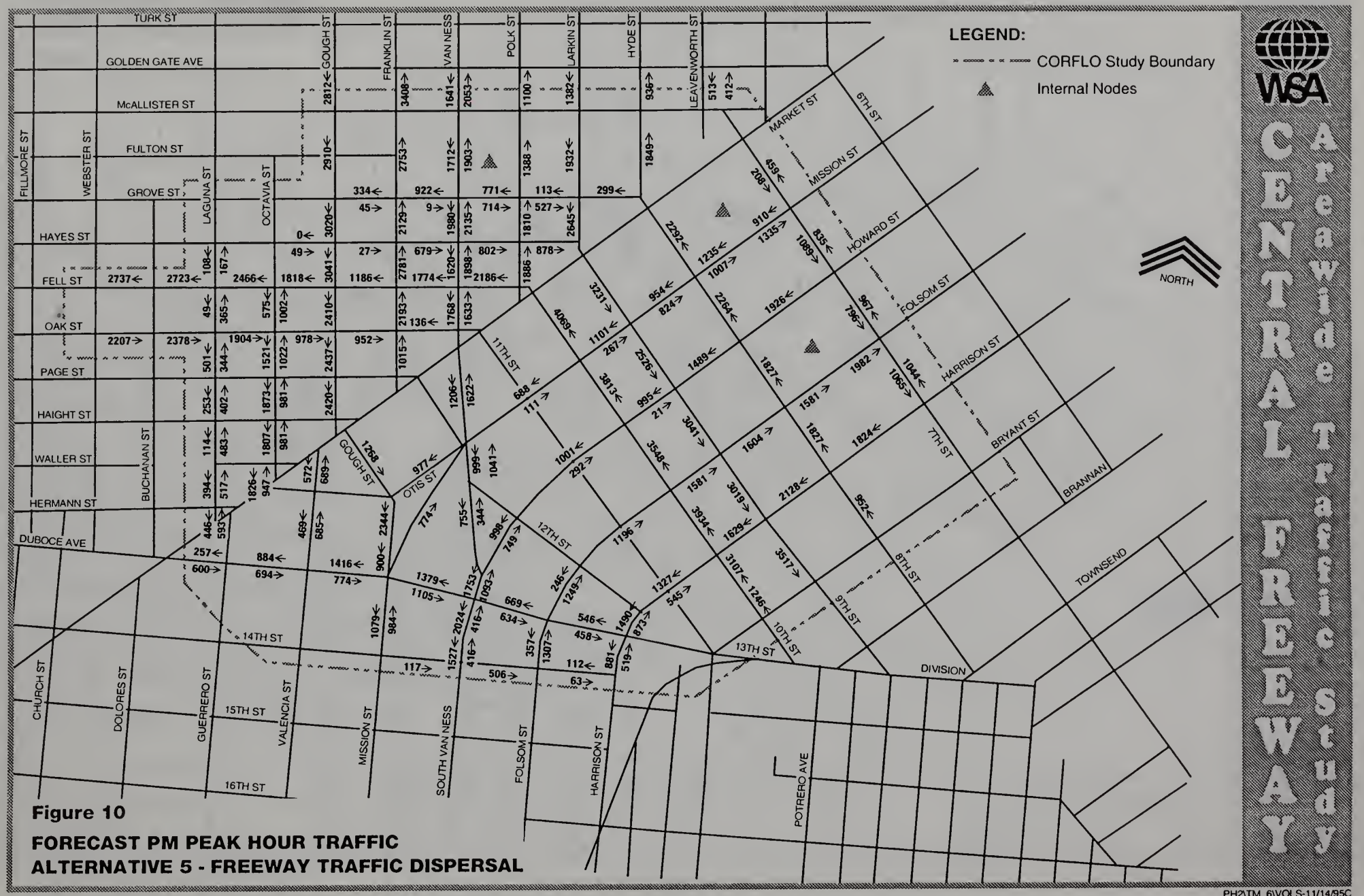



**Figure 10**

**FORECAST PM PEAK HOUR TRAFFIC**
**ALTERNATIVE 5 - FREEWAY TRAFFIC DISPERSAL**

PH2\TM_6\VOLS-11/14/95C

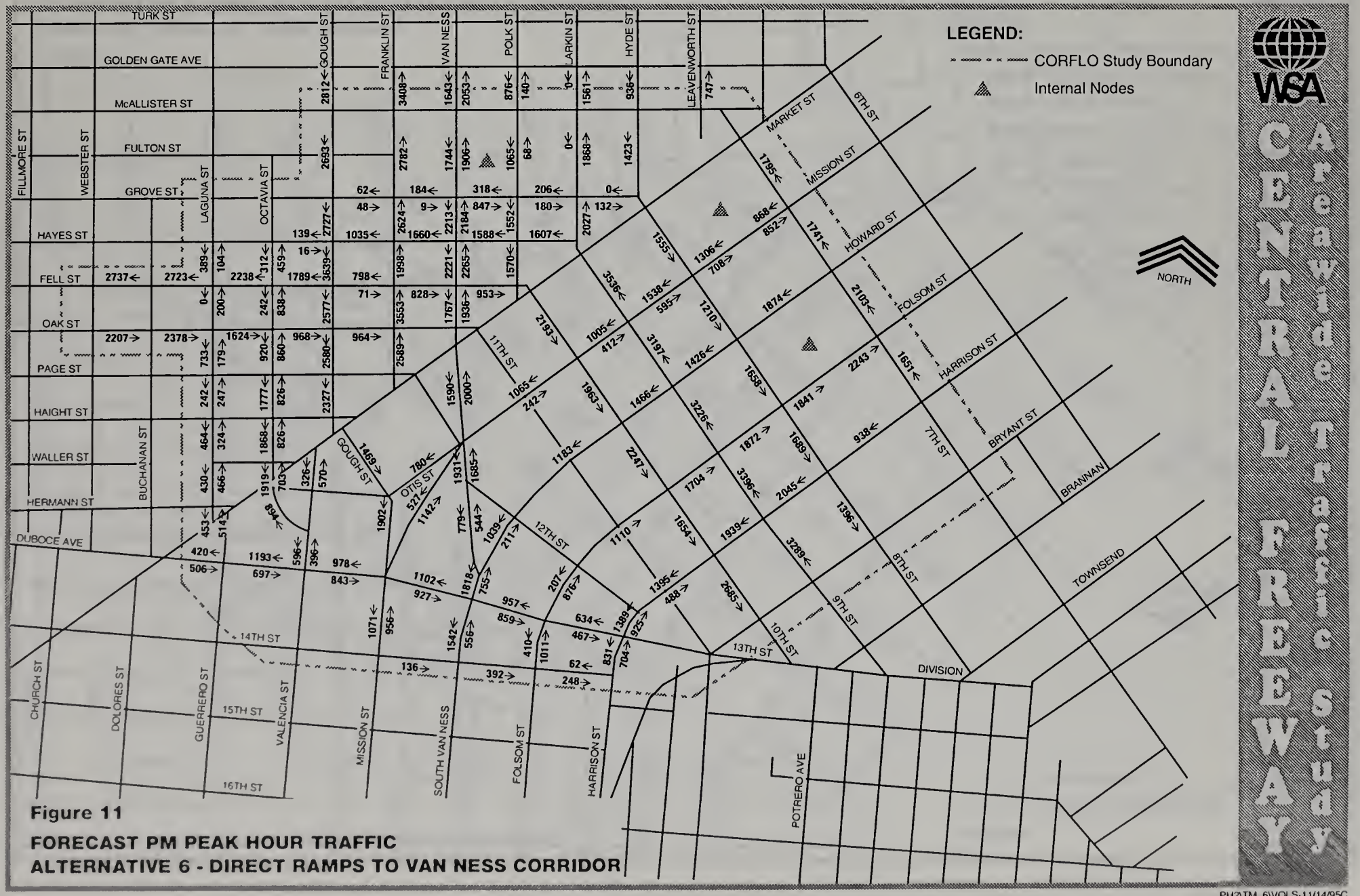



**Figure 11**

**FORECAST PM PEAK HOUR TRAFFIC**
**ALTERNATIVE 6 - DIRECT RAMPS TO VAN NESS CORRIDOR**

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Artesia Transportation Systems
CENTRAL FREEWAY

PH2\TM_6\VOLS-11/14/95C

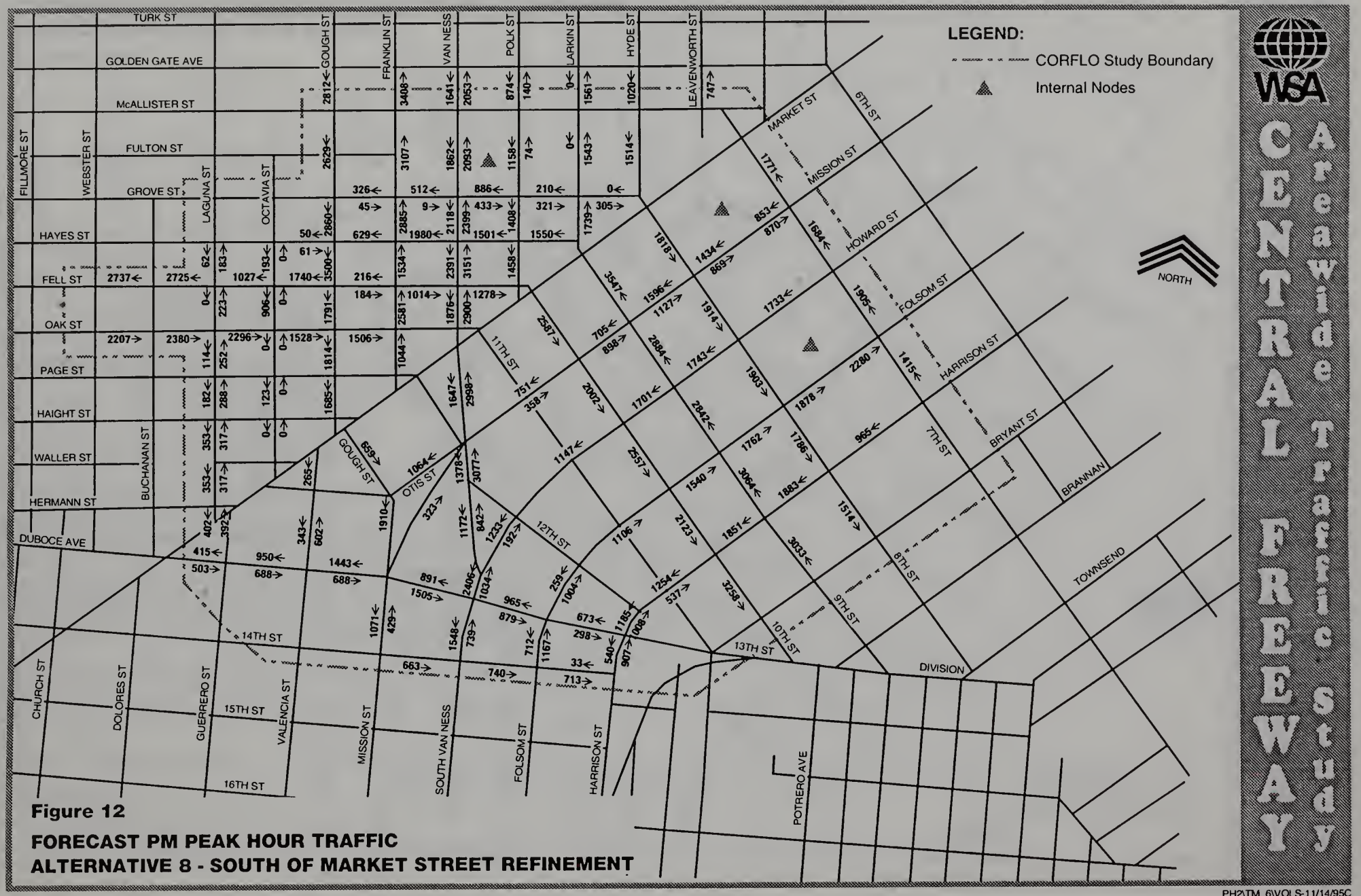



**Figure 12**

**FORECAST PM PEAK HOUR TRAFFIC**
**ALTERNATIVE 8 - SOUTH OF MARKET STREET REFINEMENT**

WSA Area Wide Traffic Study
CENTRAL FREEWAY

PH2\TM_6\VOLS-11/14/95C

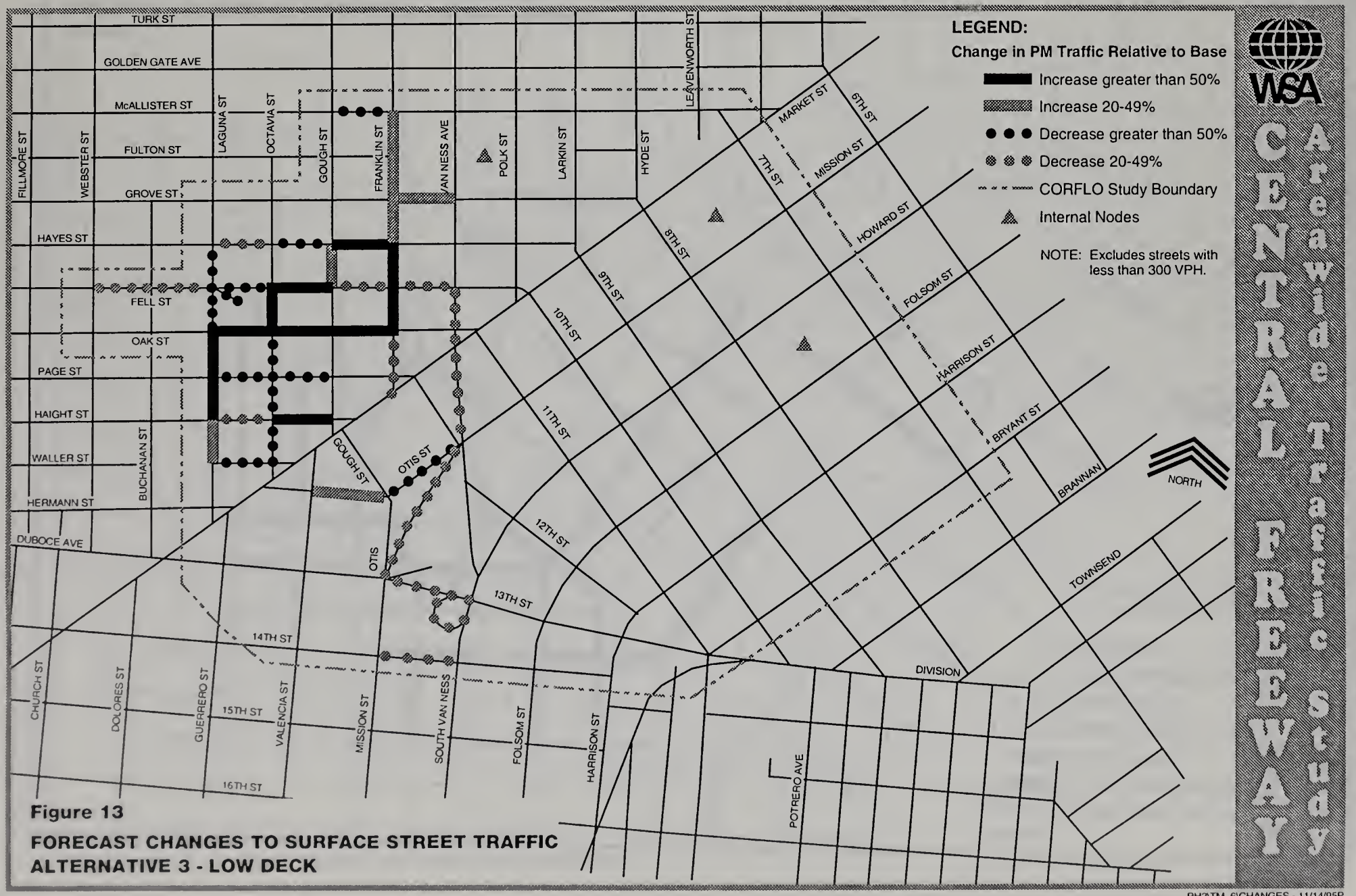



**Figure 13**

**FORECAST CHANGES TO SURFACE STREET TRAFFIC**
**ALTERNATIVE 3 - LOW DECK**

WSA

Areawide Traffic Study

CENTRAL FREEWAY

PH2\TM_6\CHANGES - 11/14/95P

**Figure 14**
**FORECAST CHANGES TO SURFACE STREET TRAFFIC**
**ALTERNATIVE 5 - FREEWAY TRAFFIC DISPERSAL**

PH2TM_6VOLS - 11/14/95P

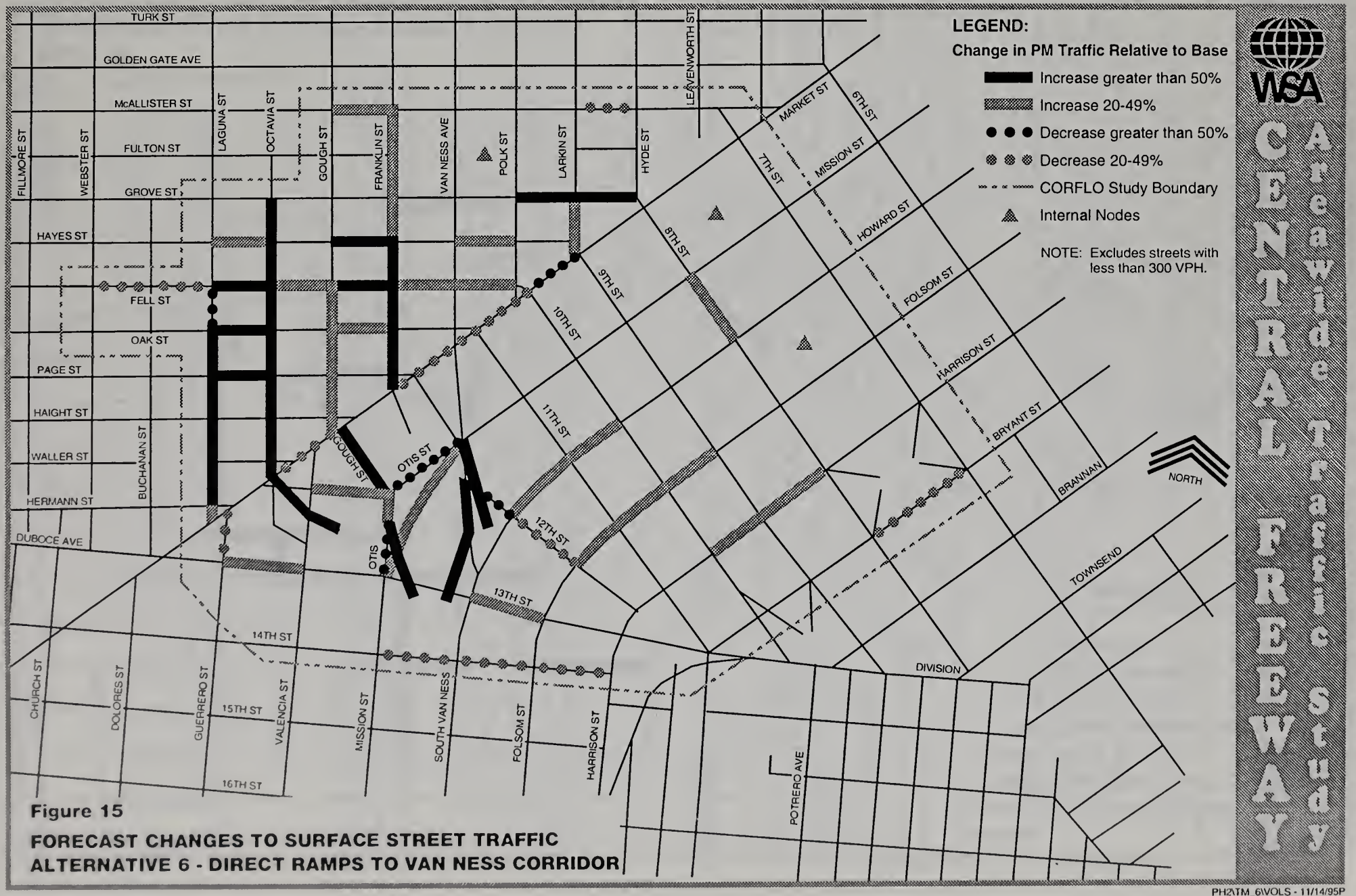



**Figure 15**

**FORECAST CHANGES TO SURFACE STREET TRAFFIC**
**ALTERNATIVE 6 - DIRECT RAMPS TO VAN NESS CORRIDOR**

WSA

Area-wide Transportation Study

CENTRAL FREEWAY

PH2\TM_6\VOLS - 11/14/95P

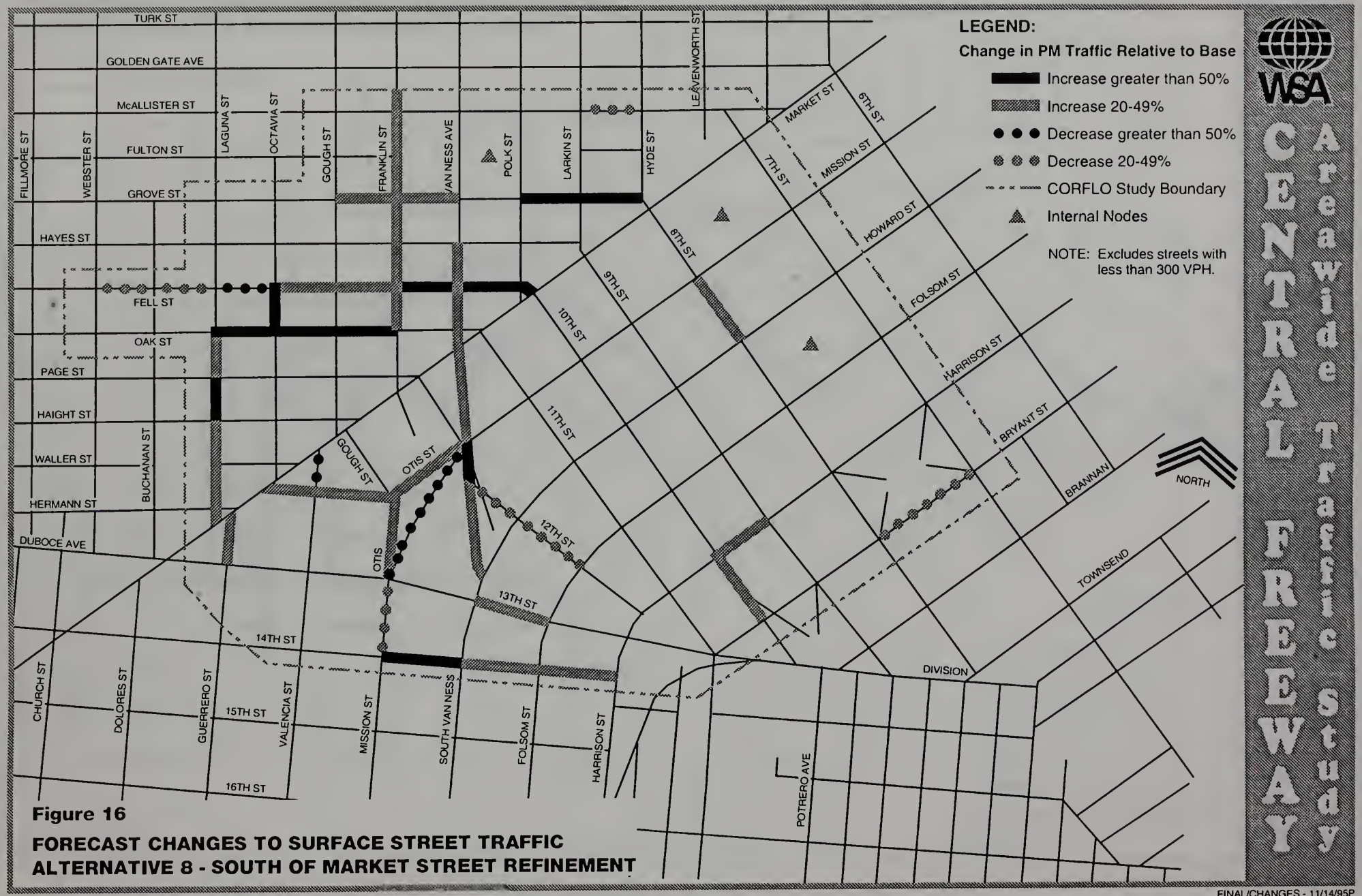



**Figure 16**

**FORECAST CHANGES TO SURFACE STREET TRAFFIC**
**ALTERNATIVE 8 - SOUTH OF MARKET STREET REFINEMENT**

FINAL/CHANGES - 11/14/95P

Not shown on Figures 14 and 15 is the increased traffic diverted onto Golden Gate Avenue and Turk Street by Alternatives 5 and 6 because these streets are outside the CORFLO network.

An additional 486 vehicles in the PM peak hour were assigned to Turk and Golden Gate in Alternatives 5 and 6 due to increased traffic across Market Street using Hyde, Larkin, and Polk Streets. This traffic would then go east/west on Golden Gate and Turk and then either turn on Gough and Franklin going to and from the north or keep heading west on Turk or come from the west on Golden Gate.

Since these streets are not currently part of the CORFLO network, these movements could not be analyzed in the same level of detail as others. However, examination of traffic counts and capacity calculations made as part of Phase I of the Central Freeway project indicate that there is excess capacity on these streets to handle additional traffic in the immediate area between Hyde and Gough streets. However, excess capacity is limited at the Van Ness Avenue intersections at Turk and Golden Gate so that it would be difficult to handle much more traffic efficiently than the additional traffic we have assigned to it without some capacity increases at those intersections. In addition, Turk and Golden Gate are both designated routes on the new City Bicycle Plan.

It is recommended that the CORFLO network be expanded to include Turk and Golden Gate in future applications.

## Market Street Screenline

Due to the unique layout of San Francisco's street grids, crossing Market Street is a major constraint for north-south traffic flow. The most meaningful approach to comparing traffic volume changes crossing Market Street for the four project alternatives is to compare cross-street volumes just north and south of Market Street rather than at Market Street itself. This approach eliminates comparative complexities related to turn movements.

Tables 3 and 4 describe the PM peak hour traffic forecast generated by the CORFLO model for each alternative. Table 3 presents the South of Market Street estimates and Table 4 presents the North of Market Street estimates. The format of these tables is to list northbound traffic at the top of the table and southbound traffic at the bottom.

Key findings shown in Tables 3 and 4 are:

- Total volumes crossing Market Street remain essentially unchanged for all alternatives (model origin-destination input);

Table 3
COMPARISON OF TRAFFIC VOLUMES SOUTH OF MARKET STREET
Weekday PM Peak Hour

| Cross Street | Alternative 1: Retrofit Alternative 2: Single Deck Hybrid | | | Alternative 3: Low Deck Over Market Street | | | Alternative 5: Freeway Traffic Access Dispersal | | | Alternative 6: Direct Ramp to South Van Ness | | | Alternative 8: South of Market Refinement | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DIR | No. of Thru Lanes | Thru Volume | DIR | No. of Thru Lanes | Thru Volume | DIR | No. of Thru Lanes | Thru Volume | DIR | No. of Thru Lanes | Thru Volume | DIR | No. of Thru Lanes | Thru Volume |
| Duboce | NB | 3 | 343 | NB | 3 | 336 | NB | 3 | 257 | NB | 3 | 420 | NB | 3 | 348 |
| Guerrero | NB | 2 | 401 | NB | 2 | 454 | NB | 2 | 722 | NB | 2 | 102 | NB | 2 | 511 |
| McCoppin & Ramps | NB | 2 | 100 | NB | 2 | 84 | NB | 3 | 1048 | NB | 3 | 894 | NB | 2 | 2539 |
| Valencia | NB | 2 | 455 | NB | 2 | 332 | NB | 2 | 689 | NB | 2 | 570 | NB | 2 | 370 |
| South Gough | NB | 2 | 85 | NB | 2 | 33 | | | | | | | NB | 2 | 86 |
| Additional Ramp (ALT 6 - Franklin) | | | | | | | | | | NB | 3 | 1467 | | | |
| South Van Ness | NB | 3 | 2155 | NB | 3 | 1667 | NB | 3 | 1622 | NB | 3 | 2000 | NB | 3 | 2732 |
| Tenth Street | | | | | | | NB | 6 | 4069 | | | | | | |
| Ninth Street | NB | 6 | 3373 | NB | 6 | 3418 | | | | NB | 6 | 3536 | NB | 6 | 3120 |
| Eighth Street | | | | | | | NB | 5 | 2292 | | | | | | |
| Seventh Street | NB | 3 | 1816 | NB | 3 | 1801 | NB | 3 | 459 | NB | 3 | 1795 | NB | 3 | 1657 |
| Sub-total | NB | 23 | 8728 | NB | 23 | 8125 | NB | 27 | 11158 | NB | 25 | 10784 | NB | 23 | 11363 |
| Central Freeway | NB | 3 | 2800 | NB | 3 | 3249 | | | | | | | | | |
| **Total** | NB | 26 | **11528** | NB | 26 | **11374** | NB | 27 | 11158 | NB | 25 | **10784** | NB | 23 | **11363** |
| | | | | | | | | | | | | | | | |
| Duboce (Construction: 14th St SB | SB | 1 | 595 | SB | 1 | 617 | SB | 1 | 600 | SB | 1 | 506 | SB | 1 | 659 |
| Guerrero | SB | 1 | 273 | SB | 1 | 327 | SB | 1 | 365 | SB | 1 | 397 | SB | 1 | 293 |
| McCoppin & Ramps | SB | 1 | 109 | SB | 1 | 103 | SB | 3 | 2025 | SB | 3 | 1766 | SB | 2 | 2671 |
| Valencia | SB | 2 | 390 | SB | 2 | 384 | SB | 2 | 572 | SB | 2 | 326 | SB | 2 | 318 |
| South Gough | SB | 2 | 661 | SB | 2 | 661 | SB | 2 | 1268 | SB | 2 | 1469 | SB | 2 | 696 |
| South Van Ness | SB | 3 | 1049 | SB | 3 | 810 | SB | 3 | 1206 | SB | 3 | 1590 | SB | 3 | 1256 |
| Tenth Street | SB | 4 | 1998 | SB | 4 | 2126 | | | | SB | 4 | 2193 | SB | 4 | 2163 |
| Ninth Street | | | | | | | SB | 5 | 3231 | | | | | | |
| Eighth Street | SB | 4 | 1762 | SB | 4 | 1606 | | | | SB | 4 | 1555 | SB | 4 | 1537 |
| Seventh Street | | | | | | | SB | 2 | 208 | | | | | | |
| Sub-total | SB | 18 | 6837 | SB | 18 | 6634 | SB | 19 | 9475 | SB | 20 | 9802 | SB | 19 | 9593 |
| Central Freeway | SB | 3 | 2731 | SB | 3 | 3057 | | | | | | | | | |
| **Total** | SB | 21 | **9568** | SB | 21 | **9691** | SB | 19 | **9475** | SB | 20 | **9802** | SB | 19 | **9593** |

Table 4

COMPARISON OF TRAFFIC VOLUMES NORTH OF MARKET STREET

Weekday PM Peak Hour

| Cross Street | Alternative 1: Retrofit Alternative 2: Single Deck Hybrid | | | Alternative 3: Low Deck Over Market Street | | | Alternative 5: Freeway Traffic Access Dispersal | | | Alternative 6: Direct Ramp to South Van Ness | | | Alternative 8: South of Market Refinement | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DIR | No. of Thru Lanes | Thru Volume | DIR | No. of Thru Lanes | Thru Volume | DIR | No. of Thru Lanes | Thru Volume | DIR | No. of Thru Lanes | Thru Volume | DIR | No. of Thru Lanes | Thru Volume |
| Laguna (Const.: Buchanan NB) | NB | 1 | 339 | NB | 1 | 366 | NB | 1 | 593 | NB | 1 | 514 | NB | 1 | 433 |
| Octavia | NB | 1 | 46 | NB | 1 | 46 | NB | 3 | 947 | NB | 3 | 703 | NB | 2 | 2834 |
| Haight | NB | 2 | 16 | NB | 2 | 62 | NB | 2 | 52 | NB | 2 | 265 | NB | 2 | 45 |
| Page | NB | 1 | 5 | NB | 1 | 5 | NB | 1 | 9 | NB | 1 | 5 | NB | 1 | 21 |
| Franklin | NB | 3 | 1014 | NB | 3 | 797 | NB | 4 | 1065 | NB | 5 | 2589 | NB | 3 | 825 |
| Van Ness Avenue | NB | 3 | 2119 | NB | 3 | 1630 | NB | 3 | 1633 | NB | 3 | 1936 | NB | 3 | 2678 |
| Fell | | | | | | | NB | 3 | 2186 | | | | | | |
| Polk | | | | | | | NB | 3 | 1886 | | | | | | |
| Hayes | NB | 4 | 1454 | NB | 4 | 1319 | | | | NB | 4 | 1607 | NB | 4 | 1307 |
| Larkin | NB | 3 | 1671 | NB | 3 | 1992 | | | | NB | 3 | 2027 | NB | 3 | 1443 |
| Grove | | | | | | | NB | 1 | 299 | | | | | | |
| Hyde | | | | | | | NB | 3 | 1849 | | | | | | |
| Seventh Street | NB | 2 | 1816 | NB | 2 | 1801 | NB | 2 | 303 | NB | 2 | 1795 | NB | 2 | 1657 |
| Sub-total | NB | 20 | 8480 | NB | 20 | 8018 | NB | 26 | 10822 | NB | 24 | 11441 | NB | 21 | 11243 |
| Central Freeway | NB | 3 | 2800 | NB | 3 | 3027 | | | | | | | | | |
| Total | NB | 23 | 11280 | NB | 23 | 11045 | NB | 26 | 10822 | NB | 24 | 11441 | NB | 21 | 11243 |
| | | | | | | | | | | | | | | | |
| Laguna | SB | 1 | 323 | SB | 1 | 399 | SB | 1 | 446 | SB | 1 | 453 | SB | 1 | 357 |
| Octavia | SB | 1 | 18 | SB | 1 | 12 | SB | 3 | 1826 | SB | 3 | 1919 | SB | 2 | 3602 |
| Gough | SB | 4 | 1721 | SB | 4 | 1686 | SB | 4 | 2420 | SB | 4 | 2327 | SB | 4 | 1194 |
| Page | SB | 1 | 36 | SB | 1 | 34 | SB | 1 | 23 | SB | 1 | 0 | SB | 1 | 35 |
| Van Ness Avenue | SB | 3 | 1359 | SB | 3 | 1141 | SB | 3 | 1592 | SB | 3 | 1767 | SB | 3 | 1324 |
| Fell | SB | 3 | 750 | SB | 3 | 742 | | | | SB | 3 | 953 | SB | 3 | 859 |
| Polk | SB | 3 | 1488 | SB | 3 | 1697 | | | | SB | 3 | 1570 | SB | 3 | 1439 |
| Hayes | | | | | | | SB | 3 | 878 | | | | | | |
| Larkin | | | | | | | SB | 3 | 2645 | | | | | | |
| Grove | SB | 1 | 39 | SB | 1 | 40 | | | | SB | 1 | 132 | SB | 1 | 207 |
| Hyde | SB | 3 | 1723 | SB | 3 | 1665 | | | | SB | 3 | 1423 | SB | 3 | 1330 |
| Sub-total | SB | 20 | 7457 | SB | 20 | 7416 | SB | 18 | 9830 | SB | 22 | 10544 | SB | 21 | 10347 |
| Central Freeway | SB | 3 | 2731 | SB | 3 | 3058 | | | | | | | | | |
| Total | SB | 23 | 10188 | SB | 23 | 10474 | SB | 18 | 9830 | SB | 22 | 10544 | SB | 21 | 10347 |

- Alternative 3 (Low Deck) increases southbound and northbound traffic on the Central Freeway and reduces northbound traffic on Valencia Street and South Van Ness Avenue and reduces southbound traffic on South Van Ness Avenue and Eighth Street;

- Alternative 5 (Freeway Traffic Dispersal) increases traffic on Guerrero Street, Valencia Street, Octavia Street Boulevard, Tenth Street, Eighth Street, South Gough Street and South Van Ness Avenue and reduces traffic on Seventh Street.

- Alternative 6 (Direct Ramps to Van Ness Avenue Corridor) generally increases traffic crossing Market Street at Octavia Street Boulevard, Franklin Street, Gough Street and South Van Ness Avenue.

- Alternative 8 would direct most of the cross-Market Street traffic now using the Central Freeway to the new at-grade crossing at Octavia Street. Van Ness/South Van Ness Avenue traffic would show a significant increase of about 500 vehicles per hour in each direction, compared with existing conditions.

In terms of total traffic and total surface street traffic volumes, Alternative 1 would serve 389 vehicles per hour per lane of traffic crossing Market Street which compares to 358 for Alternative 3; 459 for Alternative 5; 468 for Alternative 6; and 498 for Alternative 8. Relative to existing traffic as described by the Base Case alternative (Alternative 1) these traffic volumes translate to an eight percent traffic reduction per lane for Alternatives 3 and 18, and to 20 and 28 percent increases for Alternatives 5, 6 and 8 respectively. At present, about seven percent of total surface street capacity crossing Market Street is unused (see Technical Memorandum #4). By increasing traffic demands per lane of traffic on surface streets crossing Market Street, Alternatives 5, 6 and 8 would provide less system tolerance for accommodating traffic accidents, double parking, truck loading and construction blockages.

## Queuing on the Central Freeway

A major concern of Caltrans is that alternatives which shorten the length of the Central Freeway would impact traffic flow on the James Lick Freeway. Specifically, that northbound traffic on the Central Freeway would stack back into the mainline James Lick Freeway and disrupt Bay Bridge and U.S. 101 Peninsula freeway traffic.

Although the CORFLO model does not report queuing on freeways directly, average speeds reported for various intervals provide an indication of areas of freeway congestion. Figure 17 indicates areas of slow average speeds reported by the model for the last half-hour of simulation, representing the period from 5:30 PM to 6:00 PM. Heavier bands indicate average speeds less than 5 miles per hour, while the less heavy patterns indicate average speeds in the 5-15 miles per hour range.

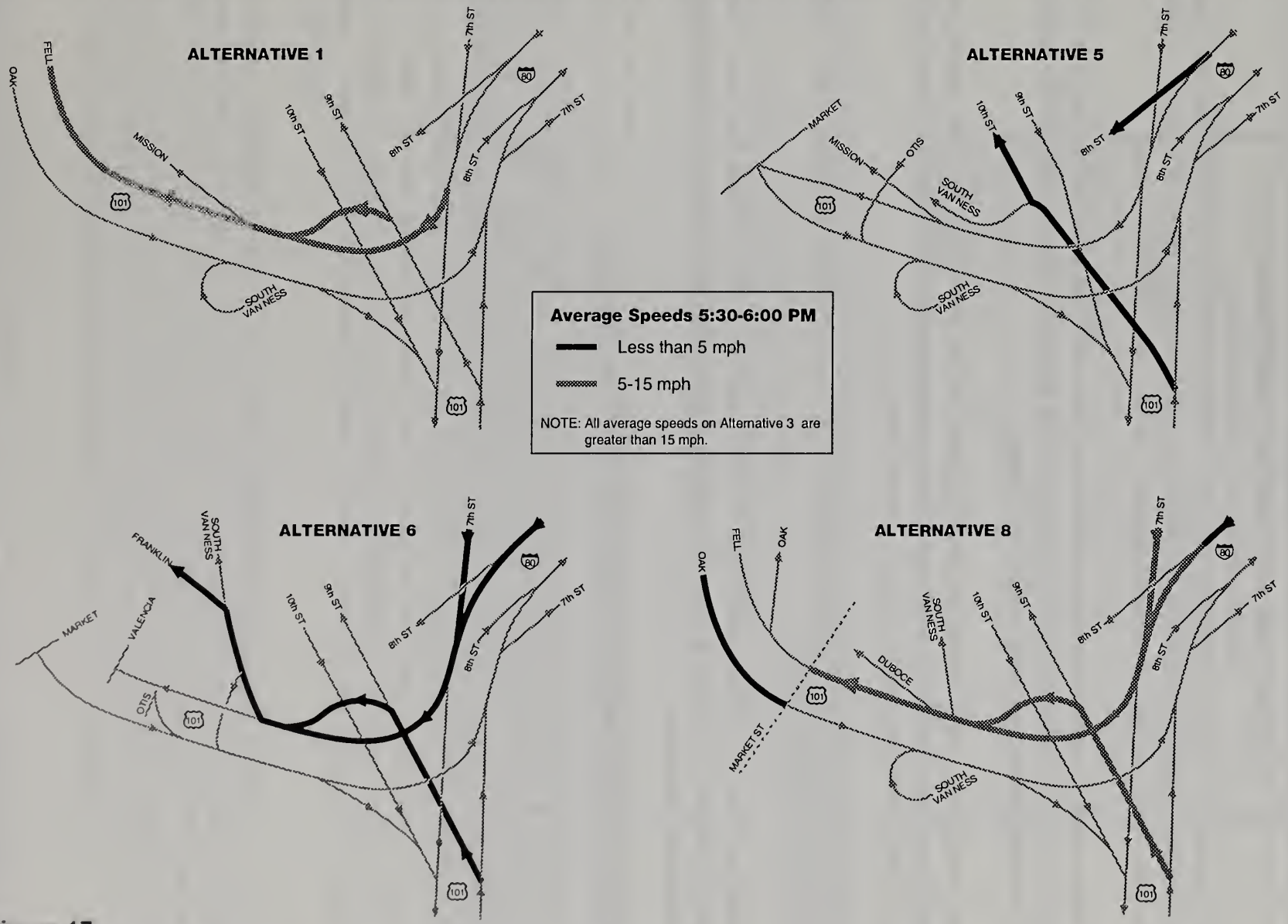



**Figure 17**
**AREAS OF FREEWAY CONGESTION**

WSA
Central Freeway Transit Study

TM_6\QUEUING 1/22/95P

As seen in Figure 17, average speeds of less than 15 miles per hour in the Base Case (Alternative 1) are reported by the model for westbound traffic between Fell Street and westbound Interstate 80 Freeway, and on the connector from northbound James Lick Freeway.

Under Alternative 5, average speeds of less than 5 miles per hour are reported from the Tenth Street off-ramp to the James Lick Freeway, and on the Eighth Street off-ramp. All freeway mainline sections are shown as operating at average speeds greater than 15 miles per hour.

For Alternative 6, the model reports speeds less than 5 miles per hour from the Franklin Street off-ramp all the way to northbound James Lick Freeway and westbound Interstate 80, with the Seventh Street on-ramp also experiencing speeds in this range.

Under Alternative 8, the model reports average speeds of less than 5 miles per hour approaching Market Street from the north on the Central Freeway, and less than 15 miles per hour from Market Street to and onto westbound I-80 and northbound James Lick.

Alternative 3 is not depicted in Figure 17 because, CORFLO reported no speeds less than 15 miles per hour for any freeway segment.

It should be noted that these figures express ideal conditions. Any incidents that would cause additional backups. The model does allow examining incidents and these impacts could be reviewed in subsequent evaluations.

## Average Central Freeway and Surface Street Speeds

The CORFLO model was also used to generate a summary of systemwide average speeds on the Central Freeway and on surface streets over the two-hour simulation period. Table 5 summarizes the findings of this exercise. As shown in Table 5, the Base Case (representing existing conditions) shows an average speed of 6.6 mph on surface streets and 43.6 mph on the freeway.

**Table 5**
**AVERAGE FREEWAY AND SURFACE STREET SPEEDS FOR DIFFERENT ALTERNATIVES**

| Alternative | Average Speed (Miles per Hour | |
|---|---|---|
| | Freeway | Surface |
| Alternative 1 (Base) | 48.8 | 8.4 |
| Alternative 3 | 48.8 | 8.4 |
| Alternative 5 | 32.1 | 3.4 |
| Alternative 6 | 21.5 | 6.7 |
| Alternative 8 | 31.7 | 5.6 |

Of the four alternatives to the Base Case, only Alternative 3 showed improved speeds on both the freeway and surface street portions of the model. Alternative 6 showed a slight improvement in surface street speed, but a deterioration in average freeway speed. CORFLO runs for Alternatives 5 and 8 showed a deterioration in both freeway and surface street speeds.

## Capacity Impacts on Selected Key Intersections

Fifteen key intersections were selected to describe the major implications on surface streets for the four project alternatives. Table 6 identifies these intersections and the project ratio of traffic volume to intersection capacity (V/C ratio). The Level-of-Service (LOS) indices for each intersection is also shown. LOS F generally describes over capacity congestion condition and LOS E describes near capacity congestion. LOS A, B, C and D denote uncongested conditions. It should be noted that this analysis is based on ideal conditions when approach lanes are not blocked by street construction, double parked and loading vehicles or by traffic accidents. The analysis shown in Table 6 also treats every intersection as an isolated intersection which would not be affected by congestion at adjacent intersections. No mitigation efforts were considered in this analysis; the purpose of the table is to indicate overall differences between alternative networks and not as the final word on individual intersections.

Existing or Alternative 1 (Base Case) conditions include two intersections operating at LOS F and four intersections operating at LOS E. This compares to Alternative 3 (Low Deck) which is forecast to have one LOS F and one LOS E intersection. Alternative 5 (Freeway Traffic Dispersal) is forecast to have one LOS F and three LOS E intersections. Three LOS F and two LOS E intersections are forecast for Alternative 6 (Direct Ramps to Van Ness Corridor), while Alternative 8 (South of Market Refinement) showed one LOS F and three LOS E intersections.

**Table 6**

**LEVEL-OF-SERVICE AT SELECTED INTERSECTIONS FOR DIFFERENT ALTERNATIVES**
**Central Freeway - Phase II**

| Intersection | Base (Alt 1/2) | | Alt 3 | | Alt 5 | | Alt 6 | | Alt 8 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | V/C | LOS | V/C | LOS | V/C | LOS | V/C | LOS | V/C | LOS |
| Fell / Laguna | 1.04 | F | 0.80 | C | 1.04 | F | 0.96 | E | 0.80 | C |
| Fell / Octavia | 0.91 | A | 0.76 | C | 0.82 | D | 0.76 | C | 0.53 | A |
| Oak / Laguna | 0.91 | E | 0.65 | B | 0.76 | C | 0.70 | B | 0.65 | B |
| Oak / Octavia | 0.41 | A | 0.80 | D | 0.76 | F | 0.95 | B | 0.80 | B |
| Market / Octavia / McCoppin | 0.80 | D | 0.70 | B | 0.98 | F | 0.95 | D | 1.13 | F |
| Market / Gough | 0.91 | D | 0.88 | D | 0.67 | D | 0.64 | D | 0.78 | C |
| Market / Franklin | 0.98 | D | 0.76 | C | 0.67 | D | 1.08 | E | 0.77 | C |
| Market / Van Ness | 0.98 | D | 0.88 | C | 0.64 | B | 0.62 | B | 0.90 | D |
| Mission / South Van Ness | 0.98 | E | 0.88 | C | 0.70 | B | 1.03 | E | 0.91 | E |
| Mission / Otis / Duboce | 0.98 | E | 0.80 | D | 0.67 | B | 0.72 | C | 0.82 | D |
| South Van Ness / 13th | 0.90 | D | 0.65 | D | 0.88 | D | 0.64 | D | 0.87 | D |
| Harrison / 9th | 1.04 | F | 1.03 | E | 0.91 | F | 0.95 | E | 0.91 | F |
| Harrison / 10th | 0.80 | D | 0.87 | D | 0.95 | F | 0.95 | D | 0.93 | F |
| Bryant / 9th | 0.91 | E | 0.98 | E | 0.98 | D | 1.18 | E | 0.80 | D |
| Bryant / 10th | 0.85 | D | 0.65 | D | 0.65 | B | 0.77 | C | 0.87 | D |

Wilbur Smith Associates; November 1995

## FUTURE TRAFFIC ANALYSIS

The upcoming environmental analysis needs to examine traffic characteristics of Alternatives 3 and 8 and the Base Case in somewhat greater detail than the current study. Alternative 8, in particular, requires more extensive analysis since it was developed late in the study when there was insufficient time to postulate and analyze potential traffic mitigation measures.

The following recommendations apply to traffic analyses during the EIR/EIS phase:

1. The CORFLO model or acceptable substitute should continue to be used for the analysis. The network should be expanded slightly north to include Turk Street and Golden Gate Avenue.

2. The Alternative 8 network requires extensive trial and error analysis to determine the most desirable traffic flow. Particular attention needs to be given to the Freeway intersection at Market Street. Widening of both the Freeway and Market Street at that intersection needs to be tested along with various turn options and restrictions. The proposed interchanges at South Van Ness and Duboce Avenues need to be developed further. Weaving between the Freeway on-ramp from 101 and the South Van Ness Avenue off-ramp needs to be analyzed in detail.

3. The Alternative 3 network needs to be modified to reduce traffic on the Freeway and on Oak Street between the Freeway and Franklin Street.

4. The base case needs to be tested with alternative on- and off-ramps at Oak and Fell Streets as proposed by Caltrans.

5. Alternative networks for traffic diversion during the construction process need to be tested and optimized.

# TECHNICAL MEMORANDUM #7
## Construction Staging

# Central Freeway
# AREAWIDE TRAFFIC STUDY

prepared for

SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

**DEPARTMENT OF PARKING & TRAFFIC**
**CITY AND COUNTY OF SAN FRANCISCO**

WSA

**WILBUR SMITH ASSOCIATES**

August 1995

# CONSTRUCTION STAGING

## INTRODUCTION

This Technical Memorandum provides an overview of the probable sequence and duration of construction for each of the conceptual alternatives under consideration. The objective is to determine impacts and their duration on traffic circulation and adjacent land uses during the construction period. The alternatives under consideration are described in detail in Technical Memorandum #5, and are defined as:

**Alternative 1:** Seismic retrofit of the existing double deck freeway structure;

**Alternative 2:** Single deck retrofit elevated crossing of Market Street terminating at Fell Street;

**Alternative 3:** Low deck crossing of Market Street, with a depressed segment between Haight and Page Streets;

**Alternative 4:** Deep tunnel under MUNI Metro terminating at Fell Street;

**Alternative 5:** Dispersal of freeway traffic involving street reversals and segregation of Central Freeway off-ramp traffic approaching from the I-80 and US-101 freeways;

**Alternative 6:** Termination of the Central Freeway south of Market Street with direct ramps oriented toward the Gough/Franklin and Van Ness Avenue corridors; and

**Alternative 7:** Tenth Street Tunnel from Van Ness Avenue to Howard Street.

Analysis of construction staging focused on the first six alternatives which were of most interest to the Task Force.

Seismic retrofit of the steel structure between the James Lick Freeway and Mission Street is planned to commence at the end of 1995. This work is required for all alternatives under consideration[1], and therefore is not included within this Technical Memorandum.

(1) Alternative 6 requires extensive reconstruction of the steel structure segment, reducing the amount of seismic retrofit work required under this alternative.

It should be emphasized that the analysis of construction staging and maintenance of traffic is conceptual in nature, and is undertaken to a level sufficient to enable a comparative evaluation of the alternatives. The construction schedules and traffic handling illustrated for the Caltrans Retrofit (Alternative 1) and Hybrid (Alternative 2) have been developed with input from Caltrans. However, assumptions have been made which may not necessarily reflect their current proposals.

It should also be noted that the schedules have been developed for construction activities only. Where right-of-way acquisition and removals are required, this is assumed to have taken place in advance of construction. The demolition and reconstruction is assumed to be scheduled during weekday daytime hours in order to minimize impacts on adjacent residents.

## OVERALL STAGING PLAN

The sequence of construction varies between the alternatives under consideration, and all will require road closures and diversion of local and/or freeway traffic for at least some periods during construction. It is a basic premise of Alternatives 1 and 2 that they would be constructed under traffic. As a consequence the schedule for construction will be extended in order to accomplish a detailed sequence of staged construction, including temporary works and partial freeway closures.

In contrast, it is anticipated that for Alternatives 3 through 6, there would be two distinct phases; a demolition phase for removal of redundant sections of the freeway, followed by a construction phase for the permanent works. Therefore, it would be necessary to close all, or portions of the existing Central Freeway to traffic, during both phases, and detour this traffic to the local street network. In addition, those local streets in the immediate vicinity of the demolition work would need to be closed, and traffic re-routed on a short-term basis.

Due to the restricted character of the site and the nature of Alternatives 3 through 6, the opportunities for the demolition and construction phases to proceed concurrently are limited. However, it would be possible for foundation work to commence behind the demolition process, with a lag period of 2-3 months to allow for clean up and possible utility relocations.

The principal impacts to local streets under the alternatives involving demolition, would be to Duboce/Division, which would require closure for up to three months during initial demolition of the Mission Street to Market Street segment; and closure of individual cross streets for a period of 2-4 weeks as demolition proceeds. For these alternatives, a detour plan would have to be established in advance of any demolition activities, including possible redirection of streets to one-way, signing and signal timing modifications. These are described later under Maintenance of Traffic.

## Alternative 1 - Caltrans Retrofit Proposal

The seismic retrofit alternative would be completed under traffic, with each structural frame being temporarily shored while the outside columns are replaced, one at a time. In addition, bent caps and footings would be strengthened. Caltrans estimates a construction period of 720 working days, or approximately 2-1/2 years. Some cross streets would require short-term closure, possibly on Saturdays, and freeway lane reductions are expected, particularly at night.

## Alternative 2 - Single Deck Hybrid Concept

The "Hybrid" alternative would utilize the portion of the existing upper deck between Mission Street and Market Street, widened to accommodate both traffic directions. North of Market Street, a new single deck would be constructed, terminating in ramps to Oak and Fell Streets in a configuration similar to the existing ramps.

The proposed construction sequence for the Hybrid alternative would consist of three stages.

- **First Stage** - Temporary ramps and supports would be constructed at Oak and Fell Streets, tying into the double-deck stub end of the demolished Gough/ Franklin portion, and the existing ramps would be removed. Traffic would remain on the upper and lower decks as at present.

- **Second Stage** - In the second stage, new structure would be constructed from the existing upper deck just north of Market Street, on an alignment adjacent to and on the west side of the exiting structure, terminating in reconstructed ramps to Oak and Fell Streets. All traffic would be diverted onto the new structure, with two lanes in each direction, and the obsolete portion of upper deck and temporary ramps would then be removed.

- **Third Stage** - Lastly, the upper deck would be widened to accommodate traffic in both directions, and the entire lower deck removed.

A construction schedule for this alterative has not yet been developed by Caltrans. However, based on the need to perform the majority of the work under traffic, and to minimize disruption to local cross traffic beneath the structure, a period of 2-1/2 to 3 years is anticipated.

## Alternative 3 - Low Single Deck Freeway Depressed North of Market Street

Alternative 3 would replace the existing Central Freeway west of the Mission/South Van Ness ramps with a single deck elevated structure passing over Market Street before descending underneath Haight and Page Streets. On- and -off ramps would be provided to Oak Street, in addition to a direct exit to Fell Street, passing under the Oak/Octavia intersection.

The construction of this alternative is estimated to take three years, during which time the Central Freeway will be closed to traffic west of the Mission/South Van Ness ramps. The work would be divided into two segments, with demolition commencing from the conform point east of Mission Street towards Market Street, then continuing to Oak and Fell Streets, utilizing the Oak/Fell ramps for equipment access.

Construction of the mainline structure between Mission Street and Market Street would start concurrently with utility relocation work in the Octavia Street corridor. For the remainder of the construction period, traffic movements on Octavia Street would be restricted to access only.

To minimize the construction period, the Haight Street and Page Street bridge structures would be constructed "at-grade", with abutments and deck superstructure completed prior to excavating the cut section between Market Street and Oak/Fell. Both Haight and Page Streets would require closure at Octavia Street during bridge construction. However, construction would only occur on one roadway at a time to minimize disruption to MUNI operations and traffic circulation. With traffic restored to both Haight and Page, Oak and Octavia Streets would be closed at their intersection for construction of the Fell Street off-ramp structure. About six months could be pared from the three year schedule if the haight and page Street bridges were constructed concurrently. However, this would close both streets at the same time and be more disruptive to local traffic.

## Alternative 4 - Deep Tunnel under MUNI Metro

This alternative would replace the existing Central Freeway with a single deck transition from the existing mainline west of the Mission/S.Van Ness ramps to a deep tunnel between Valencia and Page Streets. The westerly terminus at Oak and Fell Streets would have the same configuration as Alternative 3.

The Deep Tunnel Alternative would have similar impacts to Alternative 3, with construction taking in the order of three years, and requiring closure of the Central Freeway west of the Mission/South Van Ness ramps for the entire period.

Following demolition of the existing structure, construction would commence on the mainline structure from Mission Street to Valencia Street, and on the tunnel portals at Valencia and Page

Streets, prior to deep-bore tunneling activities. The termination at Oak and Fell would proceed in the same manner as Alternative 3.

## Alternative 5 - Freeway Traffic Access Dispersal

This alternative involves segregating northbound US-101 traffic and westbound I-80 traffic within the Central Freeway corridor; constructing a new ramp configuration to and from the Central Freeway between Market Street and South Van Ness Avenue; and reversing the US-101 ramps at Ninth and Tenth Streets, in conjunction with reversal of Eighth, Ninth and Tenth Streets. The mainline freeway would terminate at Market Street, and Octavia Street improved to a four-lane arterial.

Construction of this concept is estimated to take between 2-1/2 and 3 years to complete, and would involve two principal stages.

- **Stage One** - Work would commence on the demolition and reconstruction of the Ninth and Tenth Street ramps, at which point the local street reversals could be put into effect. At the same time, the new US-101 ramp to South Van Ness Avenue would be constructed along acquired right-of-way to the north of the existing Central Freeway alignment. The Ninth and Tenth Street ramps would be closed during this period, and all northbound US-101 traffic would utilize the existing Mission Street exit ramp. The Central Freeway would remain in operation through to Oak and Fell Streets. With completion of the Ninth and Tenth Street ramps, northbound US-101 traffic would be diverted to the Tenth Street exit while the Central Freeway connector was realigned to tie in with the new ramp to South Van Ness Avenue.

- **Stage Two** - The second stage involves closure of the Central Freeway west of the Mission/South Van Ness Avenue ramps; demolition of this portion; and subsequent reconstruction of the mainline structure between Mission Street and Market Street, concurrent with construction of the new Otis Street and Duboce Avenue ramps.

Approximately eight months could be saved on the schedule if construction teams were established to undertake both the above stages concurrently.

### Alternative 6 - Van Ness Avenue and Gough/Franklin Corridor Direct Ramp

Alternative 6 terminates the freeway at Market Street and provides direct ramps to and from the Van Ness Avenue and Gough/Franklin corridors. This alterative involves the greatest amount of reconstruction of the existing single deck portion of the Central Freeway, requiring demolition and reconstruction of the facility from the current merge of the northbound US-101 connector westwards.

The period of construction is estimated to be in the order of 2-1/2 years. During the first year, operations on the Central freeway would continue as at present while the elevated ramp structures on South Van Ness Avenue, Brady and Otis Streets are constructed. At this point, the Central Freeway would be closed to all traffic while demolition occurs concurrently on the Harrison to Mission Street, and Mission Street to Market Street segments, using the Mission/South Van Ness Avenue and Oak/Fell ramps for access, respectively. As demolition proceeds north of Market Street, the Octavia Street improvements would be completed.

### Summary

All six alternatives would require 2.5 to 3.0 years to construct. In addition to this construction period, time would be required to complete environmental studies, prepare final designs, implement construction period traffic rerouting schemes and, in some cases, acquire right-of-way.

## MAINTENANCE OF TRAFFIC

All alternatives will require road closure and diversion of local and/or freeway traffic for at least some periods during construction. This will involve establishing a succession of detours for both Central Freeway and local traffic corresponding to demolition and construction activities. Some impacts will also occur on MUNI service. Individual closures of the major local roads are illustrated in the Construction Schedules which follow this page for each of the six alternatives under consideration.

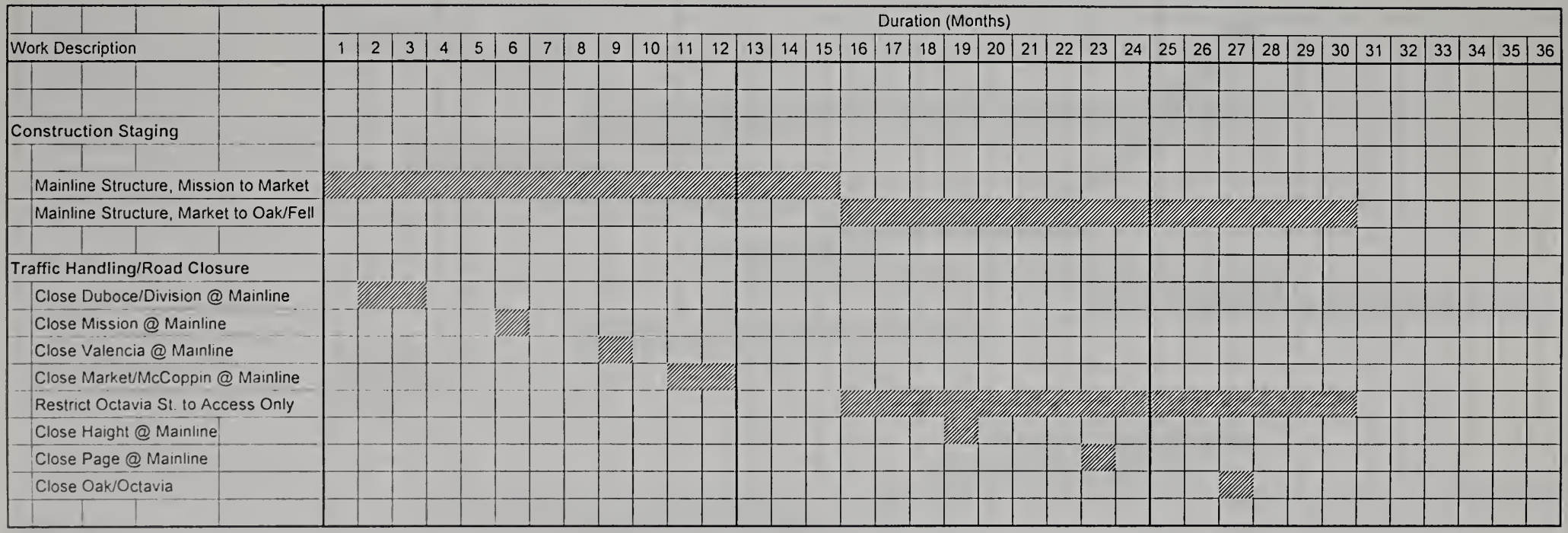
Detouring of traffic is minimized under Alternatives 1 and 2. However, as a result, the construction period is extended.

An infinite number of construction period traffic routing schemes is possible, and minor variations of a basic scheme will be required to accommodate spot construction disruptions. The basic scheme proposed for review is shown in Figure 1. This scheme avoids routing traffic along the Octavia Street corridor except for local property access. It also attempts to minimize traffic impacts in the

Central Freeway Areawide Traffic Study

**Construction Schedule**

Alternative 1: Double Deck Retrofit




*Note Traffic handling assumed for Caltrans construction schedule*

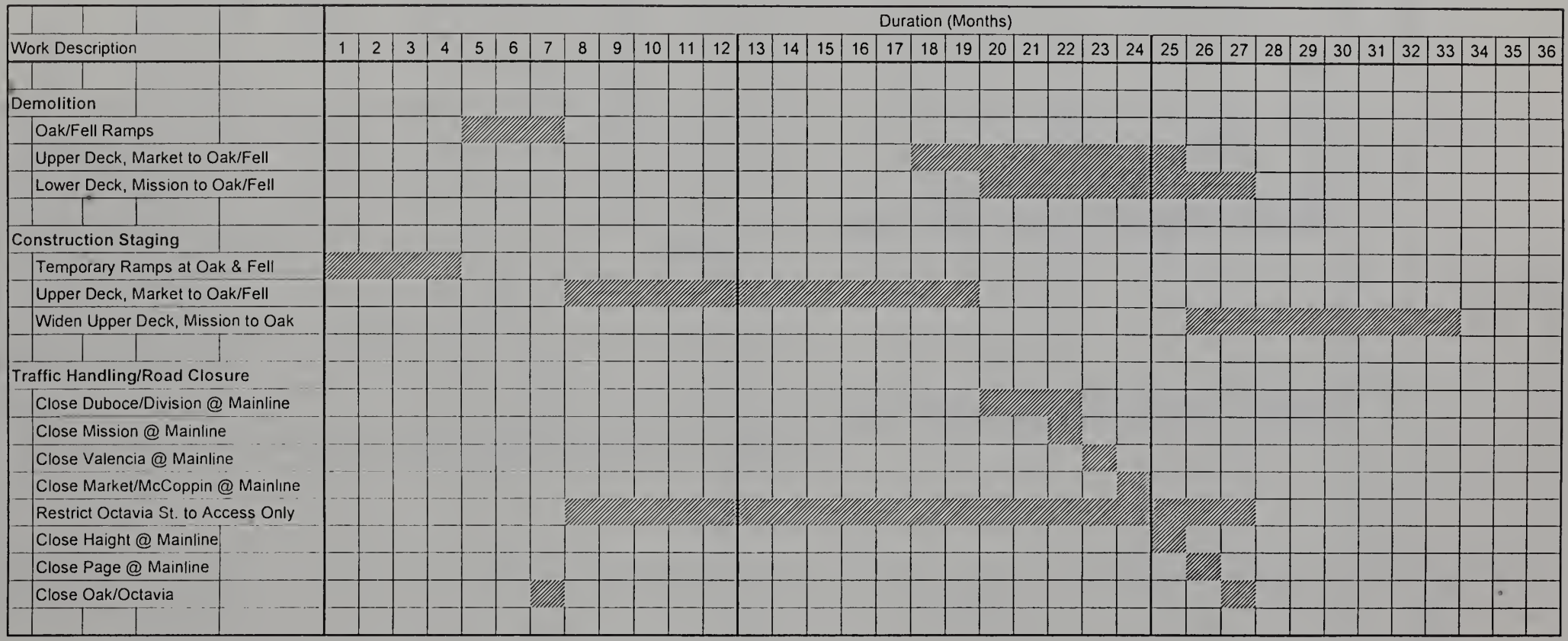
DE LEUW, CATHER

SCHED1 XLS
8/23/95

Central Freeway Areawide Traffic Study

**Construction Schedule**

Alternative 2: Single Deck




*Note: Construction schedule and traffic handling not yet established by Caltrans*

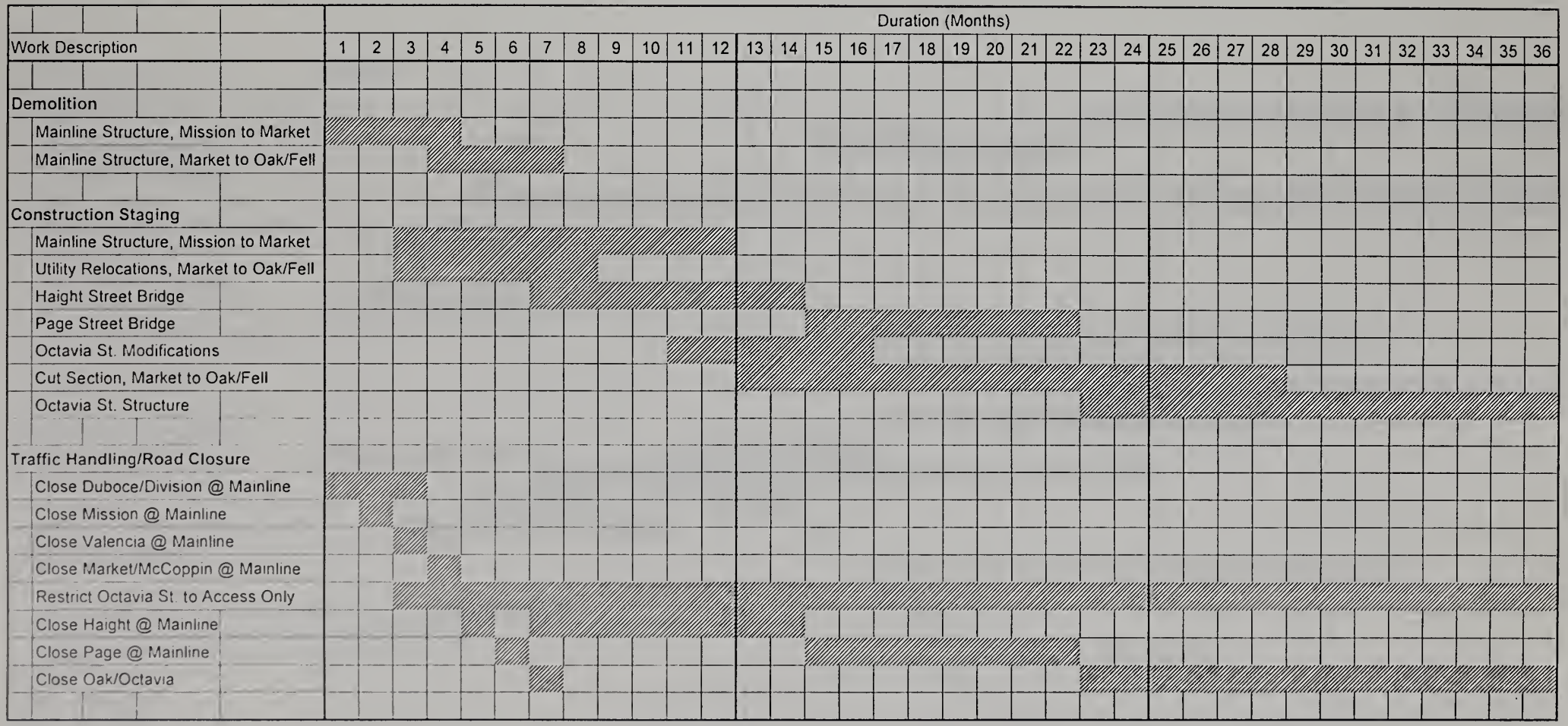
DE LEUW, CATHER

SCHED2.XLS
8/23/95

Central Freeway Areawide Traffic Study

**Construction Schedule**

Alternative 3: Low Deck over Market



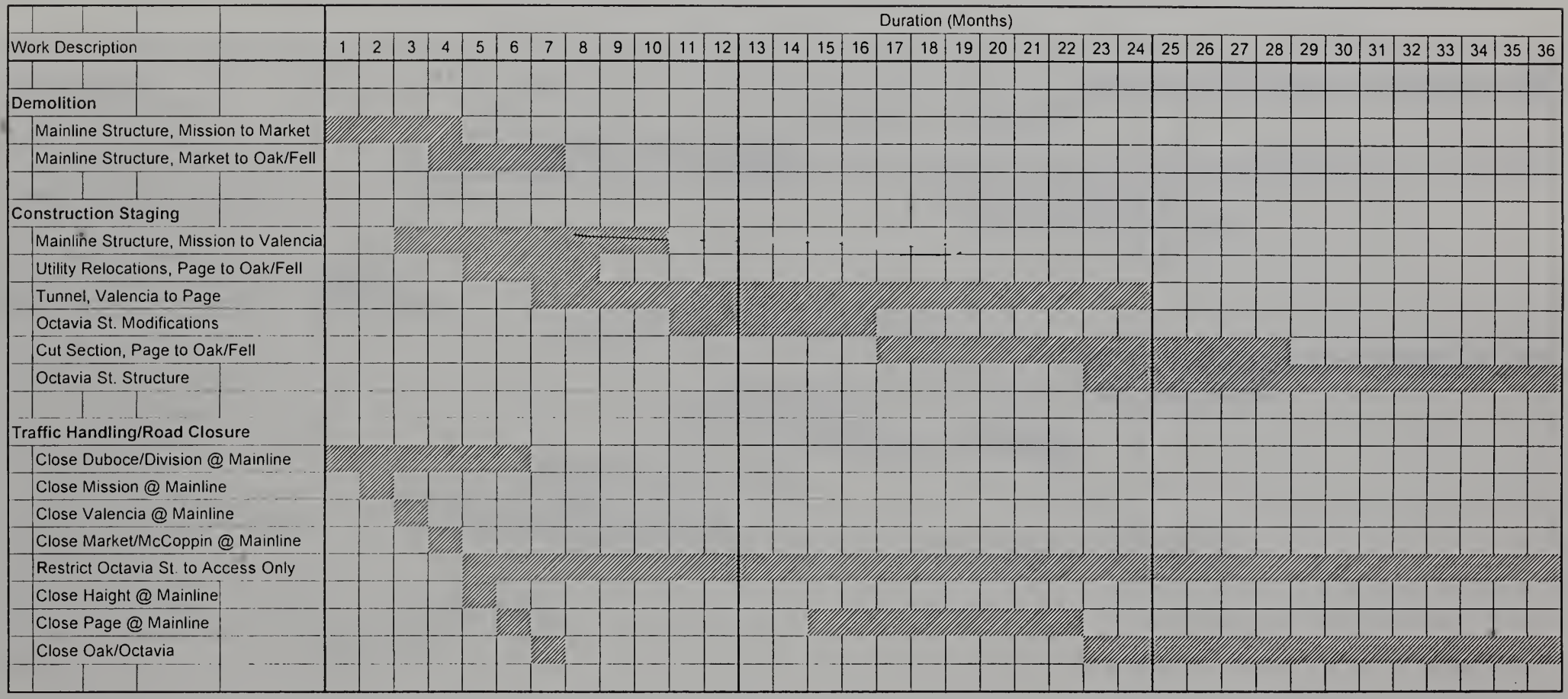

DE LEUW, CATHER

SCHED3.XLS
8/21/95

Central Freeway Areawide Traffic Study

**Construction Schedule**

Alternative 4: Deep Tunnel



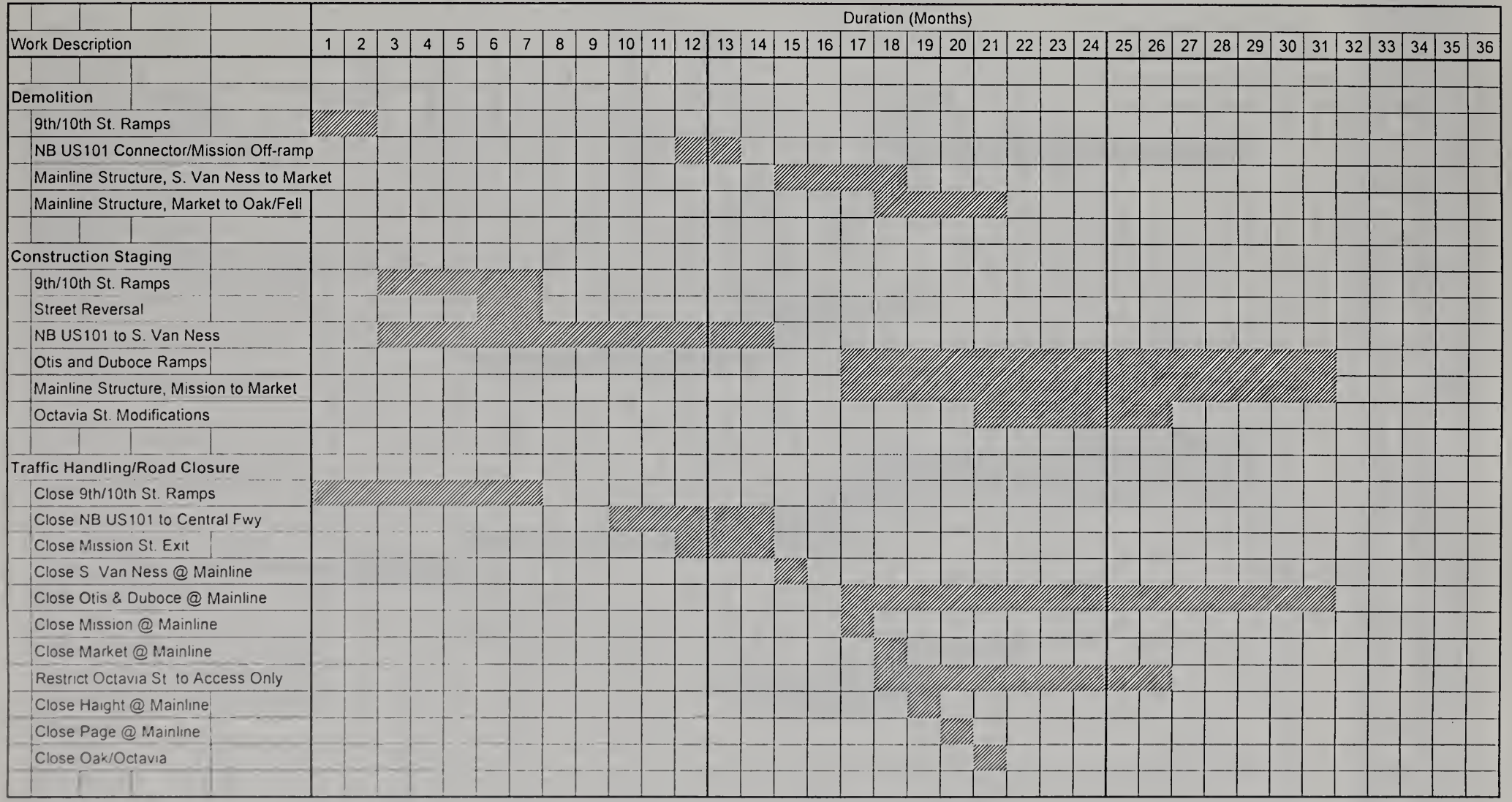

DE LEUW, CATHER

SCHED4 XLS
8/21/95

Central Freeway Areawide Traffic Study

**Construction Schedule**

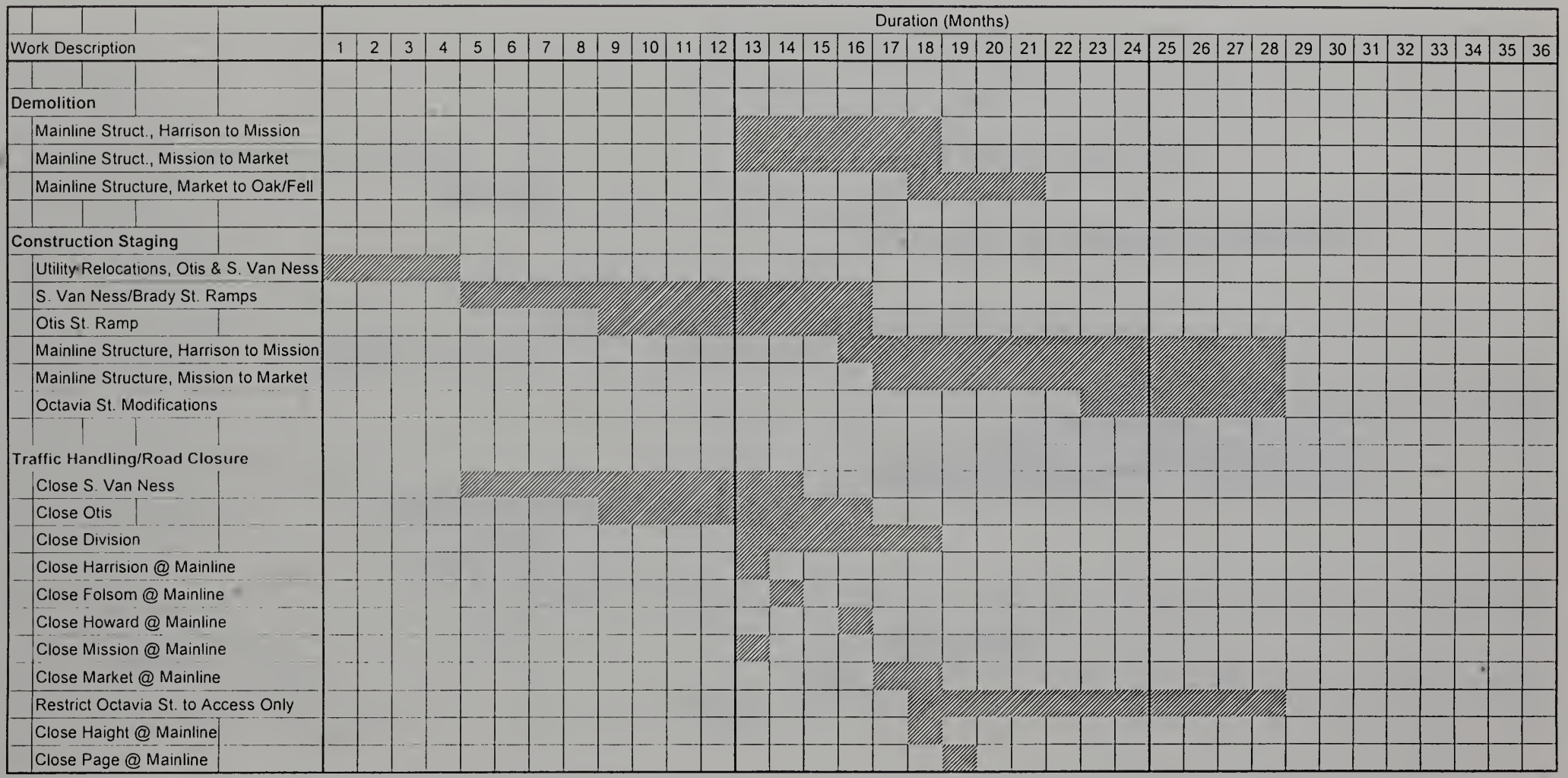
Alternative 5: Street Reversal



Central Freeway Areawide Traffic Study

**Construction Schedule**

Alternative 6: Direct Ramp to S. Van Ness




DE LEUW, CATHER

SCHED6 XLS
8/23/95

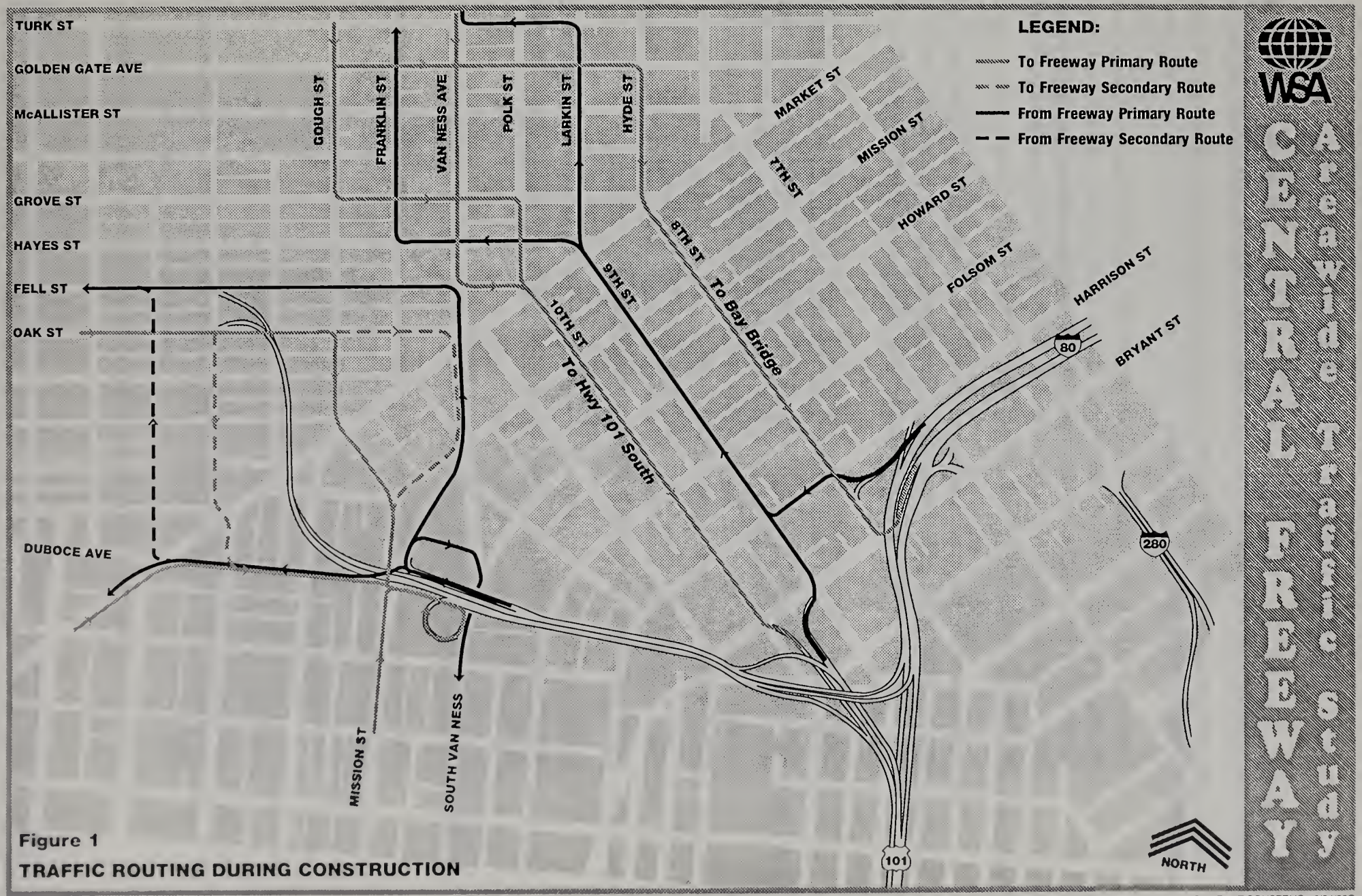



Figure 1

**TRAFFIC ROUTING DURING CONSTRUCTION**

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Civic Center area and through the Hayes Street commercial district. Key features of this basic construction routing scheme are:

1. Traffic bound for Upper Market Street or the Fell Street corridor would exit the Central Freeway at Mission Street. Upper Market Street traffic would be routed via Duboce Avenue. Fell Street traffic would be routed via Mission Street, South Van Ness Avenue, Van Ness Avenue and via a left-turn onto Fell Street. A secondary unsigned path would be provided via Duboce Avenue and Buchanan Street.

2. Traffic bound for Van Ness Avenue or Franklin Street would exit via Eighth and Ninth Streets. After crossing Market Street on Ninth Street, Franklin Street traffic would be routed via Hayes Street and Van Ness Avenue traffic would be routed via Larkin and Turk Streets.

3. Traffic destined to the freeway from Upper Market Street and Oak Street would be routed via Fourteenth Street and Mission Street to the South Van Ness Avenue on-ramp. Two secondary paths would be provide for Oak Street traffic to cross Market Street. One secondary path would be via Laguna Street and Fourteenth Street and the other would be via South Van Ness Avenue and Otis Street.

4. Traffic from Van Ness Avenue and Franklin Street would be routed to I-80 (Bay Bridge) via Golden Gate Avenue, Hyde Street and Eighth Street.

5. Traffic from Van Ness Avenue and Franklin Street would be routed to Highway 101 South via Grove and Polk Streets (Franklin Street traffic), and via Fell Street (Van Ness Avenue traffic).

Supporting traffic operations measures might include:

- Restrictions on two-way traffic flow along Van Ness Avenue between Market Street and Golden Gate Avenue except for MUNI and emergency vehicles;

- Restrictions on northbound South Van Ness Avenue traffic;

- Conversion of Duboce Avenue to a one-way westbound street;

- Restrictions on northbound Mission Street traffic at Duboce Avenue except for MUNI vehicles; and

- Conversion of Laguna and Buchanan Streets to one-way streets south of Fell Street.

All of these temporary measures have undesirable side effects. The need for these operational measures warrant further technical and public review before defining the most livable construction period plan.

## INTERIM TRAFFIC IMPROVEMENTS

Other traffic improvements should be made prior to construction; most could continue after the Freeway is reconstructed. Our recommendations include the following:

1. **Eighth Street exit from James Lick Freeway**: The movement off the I-80 ramp onto Ninth Street could be facilitated by a number of factors:

    - Allocate more signal green time for vehicles exiting the ramp at Eighth Street;
    - Coordinate the signals on Harrison at Eighth and Ninth to allow uninterrupted flow for vehicles exiting from the freeway onto Ninth Street;
    - Channelize traffic running north on Ninth Street to the left lanes to allow for continuous right-turns from Harrison Street onto Ninth Street; and
    - Sign traffic coming from the Bay Bridge to Civic Center via this ramp; rather than route them via the Central Freeway.

2. **Ninth Street and Market Street**: Not much can or needs to be done here to increase traffic flow. The key is enforcement of tow-away zones and coming up with a way to prohibit truck loading on Hayes Street in the PM peak hours at the Bill Graham Civic Auditorium facility when it reopens. The latter concern is probably important enough to start discussions as soon as possible.

3. **Turk Street and Golden Gate Avenue**: These streets have some excess capacity and their use by traffic to the Western Addition and via Gough/Franklin to Pacific Heights should be encouraged by signing and signal timing. Given the residential character of these streets west of Gough Street, we believe that curb parking should not be restricted. Also, it is important to realize that these streets do not function as major arterials west of Divisadero Street and that changes to make them one-way major arterials in that area would probably not be acceptable to the neighborhoods. These streets are also on the proposed City Bicycle System.

4. **Gough Street and Fell Street**: Currently, southbound traffic on Gough Street destined for the Central Freeway is signed to go right on Fell Street to the Laguna/Oak entrance. San Jose bound trips should be signed to turn left onto Fell Street toward the Tenth Street entrance. This would definitely be necessary if the Freeway is reconstructed and would be dependent on changes at Fell and Market Streets (see below).

5. **Fell Street and Market Street**: There currently are four lanes on Tenth Street, receiving two lanes each from Polk and Fell Streets. If desirable, increasing this to six lanes should be studied and would require some geometric changes to the intersection and some additional peak period tow-away restrictions. This change would increase traffic in front of City Hall, which may not be desirable. A logical compromise would be to have five lanes coming to Tenth Street, with three from Fell Street and two from Polk Street.

6. **Mission and Thirteenth Streets**: A number of changes should be made to facilitate traffic exiting the ramp at Mission Street. Ramp traffic going westbound to Duboce Avenue should be allowed to move concurrently with traffic going west on Thirteenth Street. Affectuating that would require the following:

   - Channelling westbound Thirteenth Street traffic into two lanes east of Mission Street.
   - Prohibiting right-turns from westbound Thirteenth Street onto Mission Street.
   - Prohibiting left-turns from the ramp onto Mission Street.
   - Designating the left-most ramp lane exclusively for Duboce Avenue and the right-most lane exclusively for Van Ness Avenue.
   - Consider making off-ramp right-turn onto Mission Street protected channelized entry.

   These are changes that should be made under any circumstances and could and should be made as soon as possible.

7. **Laguna/Guerrero and Market Street**: Some minor changes in signing, striping, and signal timing should be examined to increase capacity across Market Street. However, the nature of Laguna Street (residential, with UC Extension) makes it difficult to make any real capacity increases north of Market Street.

8. **South Van Ness Avenue and Thirteenth Street**: The possibility of widening the South Van Ness Avenue loop on-ramp to two lanes during the environmental and design process for reconstructing the Central Freeway should be reviewed. A double-lane on-ramp would have little utility once the freeway is reconstructed, but it would help significantly to accommodate construction period traffic. Allocation of more traffic signal green time to the South Van Ness Avenue approach should also be considered, particularly on weekends. Elimination of left turns would provide small but useful capacity improvements.

Prior to demolition and reconstruction of the Central Freeway, all foreseeable utility and maintenance road construction work which would reduce traffic capacity should be completed and only emergency closures of traffic lanes permitted during the freeway construction period.

# TECHNICAL MEMORANDUM #8
## Funding and Implementation

# Central Freeway
# AREAWIDE TRAFFIC STUDY

prepared for

SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

**DEPARTMENT OF PARKING & TRAFFIC**
**CITY AND COUNTY OF SAN FRANCISCO**

WSA

**WILBUR SMITH ASSOCIATES**

August 1995

# Central Freeway Financial Issues

## I. Introduction

The purpose of this technical memorandum is to examine a list of possible options for funding the replacement alternative selected for San Francisco's Central Freeway. It should be noted at the outset of this effort that this funding analysis is very general in scope and reflects existing information available at the time this report was drafted. Moreover, this report is not a detailed analysis of all project elements contained within each project alternative currently under consideration. Following the selection of a preferred alternative, and as a major component of the next two phases of the Central Freeway (the environmental phase and the preliminary design phase), a more detailed financial plan will be required. Elements of that analysis would include the specific information matched to the individual project elements of the selected alternative. Such a financial plan will ultimately specify funding sources by project elements, including detailed financial planning beyond that which was requested for this effort.

## II. Project Cost Assumptions

At the time this task report was prepared the following cost estimates were available and used throughout the analysis as the basis for funding comparisons, as well as the yardstick against which alternative shortfalls were projected.

**Table 1: Estimated Alternative Construction Costs**

| Central Freeway Alternatives | Estimated Construction Costs (000's) |
|---|---|
| 1. Double Deck Retrofit | $ 45 -50 |
| 2. Single Deck "Hybrid" Retrofit | 65 |
| 3. Low Deck Alternative | 75 |
| 4. Deep Tunnel Alternative | 145 |
| 5. Street Reversal Alternative | 85 |
| 6. South Van Ness Ramps Alternative | 105 |

## III. Central Freeway Funding Background and Assumptions

Following the Loma Prieta earthquake, Congress appropriated $1 billion in federal Emergency Relief (ER) funds for transportation repair and replacement assistance throughout Northern California. Under federal regulations, these funds were available for obligation during the 180 days following the earthquake with no non-federal match requirements. In this time period, portions of these funds were used for such items as the

Bay Bridge repairs, substitute ferry service, general clean up, and structural shoring work on damaged structures.

Following the 180 day period, the ER funding requires a match ratio that corresponds to the match requirement of the federal "system" of which the damaged transportation facility is part. For example, in the case of the Central Freeway, which was part of the Federal Aid Primary system, the match ratio (in California) is approximately 85% federal and 15% non-federal. By 1991, it was apparent that the damage to the regional freeway system would utilize the bulk of the ER funds, and this group of projects was referenced in a 1991 Federal Highway Administration (FHWA) memorandum entitled "Funding Schedule to Complete Loma Prieta Emergency Relief Work". This memorandum established an Emergency Relief "cap" for most projects, citing the maximum amount of federal funds which would be available for project replacement and/or repair. These amounts are shown in the following Table 2.

**Table 2: 1990 Estimate of Loma Prieta Emergency Relief Funds**

| Project | Total Project Cost | Federal Share | ER Cap |
|---|---|---|---|
| Cypress Replacement | $1,121.0 M | $1,010.0 M | None |
| Terminal Separator | 85.5 M | 60.5 M | 60.5 M |
| Embarcadero | 133.0 M | 58.5 M | 58.5 M |
| Central Freeway | 44.3 M | 40.0 M | 40.0 |
| All Others | 324.0 M | 200.0 M | None |
| | | | |
| Totals | $1,707.8 M | $1,369.0 M | NA |

In reviewing this table it would appear that FHWA, in cooperation with Caltrans, assumed a Central Freeway replacement project that did not require a total reconstruction of the facility, as was the case with the Cypress and the Embarcadero. In other words, it appears the lower replacement cost (i.e. $40 million) placed on the Central assumed a smaller construction project that would utilize seismically upgraded portions of the existing structure.

Following requests from the City of San Francisco for verification of the justification for

the Central's estimate, Caltrans responded with a February 27, 1995 letter from Caltrans

District 4 Director, Joe Browne. In his letter Mr. Browne states the following:

"The intent of Emergency Relief (ER) funds is to repair the transportation infrastructure to a serviceable level as soon as possible after the event, such as a natural disaster. It does not permit an upgrading of the facility and, conversely, requires that any replacement facility provide a comparable level of service. The $40 million of ER funds for the Central Freeway was based on the need to provide a serviceable facility after the Loma Prieta earthquake. This was based on the immediate need, at that time, **to retrofit the existing structure.** Obviously, conditions have changed and we are now looking at different alternatives. However, the ER funds are not subject to that flexibility and are capped at $40 million."

A more recent letter to Mayor Jordan from Caltrans Director, James Van Loben Sels, dated April 26, 1995, further seeks to justify the cap that was applied to the Central Freeway. The letter states:

"The Central Freeway was capped by FHWA at $40 million in ER funding. The cap was established by FHWA when they agreed to participate with ER funds in only the portion of the structure that was double deck. The remainder of the work was to be funded through the State Transportation Improvement Program (STIP) process and would have to compete with other projects for funding. The entire $40 million has been obligated. Approximately $16.5 million has been spent, or is being spent on demolition, retrofit, and alternative project studies street repair. **The remaining $23.5 million is reserved for the alternative Central Freeway Project.**"

In addition to this constraint, the Central Freeway is the last project on the list to move through a planning, environmental and design process. Because other projects were initiated earlier, they had established a request for ER funding in advance of knowing how much money would be required by the Central. Moreover, the Cypress Reconstruction, with no Caltrans limitation on funding, has consumed a substantial amount of ER funding over and above the current estimates. Current estimates of total construction costs for the Cypress Reconstruction project are $933 million, as compared to an original 1992 estimate of $695 million.

## IV. Obligations of Central Freeway Funding to Date

In addition to the statements regarding the cap associated with the Central Freeway, Caltrans has obligated a portion of the $40 million ER funds during the last five years, as indicated by the previous reference. The current estimate of obligations for demolition, seismic upgrades, and redesign of a replacement facility is estimated to be approximately $13 million. This would suggest that from the original $1 billion set aside for repairs related to the Loma Prieta earthquake, only $27 million remains to complete the Central

Freeway, $23.5 million in federal emergency relief fund and $3.5 million in State resources.

## V. Historical Background Information: Mid-Embarcadero Roadway

This technical memorandum summarizes the key funding assumptions for the other major San Francisco roadway project affected by Loma Prieta, the Mid-Embarcadero Roadway. Throughout the analysis of the Central Freeway alternatives, questions were raised as to why that particular project appeared to have sufficient resources, as compared to the Central.

The Mid-Embarcadero Roadway/Terminal Separator Project is currently in the environmental and design phase of development. The project is scheduled for completion in 1999. The entire roadway project was originally divided into three segments: South, Mid, and North. The South Embarcadero Roadway Project was completed in 1994 and the North Embarcadero segment will be completed later this year. As cited earlier, the Mid-Embarcadero Project was also capped at a specified funding level, $58 million, by FHWA/Caltrans in 1990. Further, a few participants in the Central Freeway process are concerned that the City's concentration, energies and resources have been disproportionately directed toward the Waterfront as opposed to the Central Freeway and its surrounding neighborhoods.

However, it is important to consider the fact that the collection of Embarcadero Roadway projects has been in development for almost 20 years. In 1976 a citizens committee was convened to work with city, Port and Caltrans staff to develop the Northeast Waterfront Plan. That plan recommended the removal of the Embarcadero Freeway. The plan, coupled with the Governor's decision to withdraw funding for the I-280 Freeway extension, resulted in a ballot measure to remove the Embarcadero Freeway in 1985. That measure was defeated, leading to a decision to implement boulevard treatments north and south of the structure, with the F-Line Streetcar line paralleling the land side border of the existing freeway.

At the time the Embarcadero Freeway was determined seismically damaged, the key to moving the Replacement Project ahead quickly was the existence of a plan and a general understanding of the replacement alternative. This did not obviate the required 24 month environmental effort currently underway, but it did allow project financing, urban design work and ancillary development to proceed quickly due to an understanding of the project's transportation, funding and land use impacts.

**Table 3**

**FUNDING SOURCES:**
**MID-EMBARCADERO ROADWAY REPLACEMENT PROJECT**

| Funding Sources @ 5/95 | Total Funding by Source |
|---|---|
| FHWA Emergency Relief (MID)[1] | $ 42,343,657 |
| State Emergency Relief[2] | 9,668,900 |
| State Congestion Relief 90 | 5,145,492 |
| State Congestion Relief 92 | - |
| CALTRANS Land Sales[3] | 4,215,978 |
| Transportation Sales Tax[4] | 1,800,000 |
| Other Local[5] | 481,000 |
| TOTAL | $ 63,655,027 |

[1] Emergency Relief Fund total represents maximum eligible/reimbursable amount for most expensive MID roadway alternative (5B).

[2] $9.06 million is estimated cost of Embarcadero Freeway demolition and related items ($8.3 million) plus $763,020 matching funds for environmental review.

[3] Assumed net proceeds from sale of Broadway & Clay/Washington parcels + $360,000 in parking revenue collected during FY 94/95 and FY 95/96.

[4] It is assumed that up to $5.6 million in sales tax funding is available to MID if other sources do not come through.

[5] Includes Mayor's Emergency Relief Fund ($481,000) plus Port cost share for seawall repairs ($ amount to be determined).

Table 4

FUNDING SOURCES:
EMBARCADERO SURFACE ROADWAY PROJECT

| Funding Sources @ 5/95 | Total Funding by Source |
|---|---|
| FHWA Interstate Transfer (I-280 TCP) | $ 62,400,000 |
| ISTEA/TEA | 735,000 |
| SFPTC Cost Share[1] | 2,141,321 |
| Port of San Francisco | 700,000 |
| Transportation Sales Tax[2] | 20,723,228 |
| FCR Funds - Federalized/Other Projects | 4,651,010 |
| State Match King - FCR Funds | 1,537,317 |
| Catellus Land Donation | 11,000,000 |
| Catellus Infrastructure Cost Share | 880,000 |
| Rincon Park Reimbursement[2] | 2,157,838 |
| Other Local[1] | 961,912 |
| TOTAL | $ 107,887,626 |

[1] Project budget includes approximately $2,100,000 in costs that will be reimbursed by the PTC, as these are costs directly attributable to Muni Projects. This cost sharing figure will change as the projects are fully designed and are subject to departmental negotiations.

[2] Sales Tax $20.7 million includes $2.2 million that was advanced for Rincon Park portion of MTC land purchase. That amount will be returned to Sales Tax if Rincon Park reimbursement funds are successfully obtained through SF Redevelopment Agency.

Table 5

**STATE TRANSPORTATION IMPROVEMENT PROGRAM**
**San Francisco Program**
Adopted 1994
(Estimates in Thousands)

| Project | Amount Programmed by Year (thousands) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 94/95 | 95/96 | 96/97 | 97/98 | 98/99 | 99/00 | 00/01 | TOTAL |
| BART Station Access Program | | 347 | | | | | | 347 |
| Muni 14-Mission Trolley | 118 | | | | | | | 118 |
| Muni Daly City Trolley | | 384 | | | | | | 384 |
| Muni Trolley Car Replacement | | | 1,872 | | | | | 1,872 |
| Muni Trolley Car Replacement | 1,324 | | | | | | | 1,324 |
| Muni Fleet Expansion - LRV | | | 43,700 | | | | | 43,700 |
| Muni LRV Replacement | 12,600 | | | | | | | 12,600 |
| Muni LRV Expansion/Replacement | | | | | 35,300 | | | 35,300 |
| Muni Market Street Car Rehab | | 290 | | | | | | 290 |
| Muni Metro Escalators/Elevators | | 500 | | | | | | 500 |
| Muni Metro Subway Signals | 1,750 | | | | | | | 1,750 |
| Muni Metro Track Improvements | | 423 | | | | | | 423 |
| Army Street Widening | 1,700 | 11,800 | | | | | | 13,500 |
| Embarcadero Expressway | | | | | 15,000 | | | 15,000 |
| Embarcadero Improvements | 10,853 | | | | | | | 10,853 |
| Ferry Building Renovation | | 1,000 | | | | | | 1,000 |
| 19th Ave. Muni Station | | 352 | | | | | | 352 |
| Caltrans Historic Bridge Signing | 3 | | | | | | | 3 |
| New Ramps - 6th to King | 20,723 | | | | | | | 20,723 |
| **TOTAL** | $ 49,071 | $ 15,096 | $ 45,572 | $ - | $ 50,300 | $ - | $ - | $ 160,039 |

* Assumes 1994 adopted levels, future amounts subject to change.

Source: Metropolitan Transportation Commission and Pittman & Hames Associates.

Financial planning for the nine waterfront projects has also been underway for a number of years. A total of 36 funding sources are required for the entire list of transit and roadway improvements currently underway along the entire length of the waterfront. The Mid-Embarcadero Roadway Replacement Project and the entire Embarcadero Surface Roadway Project funding sources are listed in Tables 3 and 4, respectively.

As can be seen in Table 3, the major funding sources for the seismically damaged portion of the roadway, the Mid-Embarcadero, are limited to only a few major funding sources. These include:

1.) Federal Emergency Relief,
2.) State,
3.) Land Sales, and
4.) Local Sales Tax moneys.

However, as Table 4 shows, the entire roadway project includes several development fees, federal withdrawal funding originating with the I-280 Freeway, additional state funding and Port of San Francisco donations. In other words, the additional funding required for urban design enhancements, beyond the functional replacement of the damaged roadway, reflects a much broader list of potential revenues.

## VI. Central Freeway Potential Funding Options

### A. Emergency Relief Funds

Regardless of the current Caltrans estimate of remaining funds left in the original ER allocation, significant debate exists around the question of the $40 million "cap" of available ER funding. This debate is fueled by the fact that Caltrans is currently considering two replacement hybrid projects that individually exceed the so called $40 million limitation: Alternative 1, Double Deck Retrofit, at $45-50 million and Alternative 2, Single Deck Hybrid Retrofit, at $65 million. It would appear that if Caltrans is considering functional replacement alternatives estimated over and above "the Cap", they either consider the cap a guideline or are aware of other sources of funds that could be used for their alternative. Other funding sources Caltrans may be considering are STIP reprogramming or the allocation of state Seismic Retrofit Program funding.

For the purposes of this analysis it is assumed that the region could obtain FHWA or State funding at least to the amount of the highest Caltrans retrofit alternative, or $65 million. This assumption is premised on the selection of a replacement alternative that meets FHWA/Caltrans requirements, including the following:

1. functional replacement of the original project,

2. roadway capacity is not reduced as a result of the replacement project, and

3. no ancillary improvements beyond the functional replacement of the original project.

**B. Emergency Relief Stand-By Appropriation**

In addition to the Emergency Relief funding that Congress authorizes in the event of a federally declared disaster, annual appropriations are also available via the Congressional Emergency Relief stand-by appropriation. Each year Congress appropriates approximately $100 million, available up to the end of the fiscal year, for transportation needs associated with natural disasters. For those years without significant natural disasters, the funds are returned to the US Treasury at the end of the federal fiscal year. If funds for this program are not fully expended in a given year, it is possible to earmark funds for a particular project. To accomplish this, the local jurisdiction must have the full cooperation of their Congressional delegations, and hopefully, not have another major budget objective for that particular year.

Following the selection of an alternative, given sufficient time, this funding source could be a potential source of revenue for the next phase of the Central Freeway Project. If a decision is reached and approved by the Board of Supervisors prior to the end of the fiscal year, September 30, 1995, Phase II: Environmental and Engineering costs might be covered via a last minute earmark on the remaining funding left in this "stand-by appropriation." By seeking these funds now, it would preserve the original ER "cap" funds for subsequent phases.

It should be noted, however, that the acquisition of new ER revenues will be an uphill battle for California. There are many in Congress that have concluded California has been back to the "ER well" too often in the last decade. The total Loma Prieta cap, which began at $1 billion, was subsequently raised to $1.365 billion. Moreover, the pivotal role this state plays in the President's re-election strategy may make it difficult to acquire additional funding from a Republican-controlled Congress, particularly prior to November 1996.

**C. STIP and RTP Reprogramming**

In researching this report, the consultant team contacted Ernie Satow (Caltrans District 4) to discuss options available to the project. Mr. Satow suggested that the only other source of funding available to the Central Freeway (beyond the $40 million cap of Emergency Relief funding) was a reprogramming of the existing State Transportation Improvement Program (STIP). That program delineates all federal and state funding commitments to local roadway programs over a multi-year period. The state program is currently experiencing a significant shortfall in projected levels of needed transportation
Table5

Table 6

SAN FRANCISCO COUNTY
**Regional Transportation Plan Investments**

| Project/Program | Funding ($ millions) | | |
|---|---|---|---|
| | Total Cost | RTP Track 1 Funds | Other Funds |
| **Maintain, Operate, and Improve MTS** | | | |
| Rehabilitation of MTS streets and roads; fully funds maintenance of existing system | 44.2 | 18.6 | 25.6 |
| BART capital program shortfall; 75 percent of county share of shortfall is funded | 88.0 | 66.0 | - |
| Muni capital replacement program shortfall | 472.7 | 24.5 | 448.2 |
| Seismic retrofit of Bay Area bridges, county share | 16.0 | 14.0 | - |
| MTC Corridor Operations System; strategies to improve MTS operations | 3.0 | 3.0 | - |
| Initial capital cost for TransLink (universal ticket) on Muni | 13.9 | 13.9 | - |
| Arterial improvements/signal timing projects | 10.0 | 5.0 | 5.0 |
| CalTrain capital replacement needs | 5.2 | 5.2 | - |
| Muni: 15 trolleys for expansion of service | 16.0 | 16.0 | - |
| Mod. to Muni's Geneva/Green maint. facilities | 28.0 | 28.0 | - |
| Railroad tunnel improvements for enable double-stack container access to Port of San Francisco | 1.3 | 1.3 | - |
| Partial right-of-way for Doyle Drive improvements | 12.0 | 3.4 | - |
| Bicycle and pedestrian improvements | 28.5 | 5.0 | 23.5 |
| | | | |
| **Prior Commitments** | | | |
| Muni Metro East project | 168.1 | 122.7 | 45.4 |
| CalTrain electrification and extension to Beale and Market St. in downtown San Francisco | 137.5 | 111.5 | 26.0 |
| | | | |
| **Track 1 Project Alternative Total** | | **438.1** | |
| | | | |
| **Track 1 Revenues** | | **438.1** | |
| | | | |

funding. Current estimates include a $5 billion shortfall over the next 20 years. As with other non-Emergency Relief funding sources, the City of San Francisco would be required to delay, eliminate or downsize existing STIP funding commitments to provide funds to the Central Freeway. Unfortunately, following the completion of I-280 and the Embarcadero Roadway Projects, the list of potential projects is very short. Only the following list of projects are of sufficient size to be considered as possible sources of reprogramming funds:

The STIP reprogramming would require the approval of the San Francisco Board of Supervisors, the Metropolitan Transportation Commission, and the California Transportation Commission. More important, however, to a STIP reprogram is the availability of sufficient STIP funds to meet the Central Freeway's needs. The State is currently considering a "zero-based" budgeting strategy for the STIP update. Last, most STIP funding funds will not be available until late in this decade, further reducing their applicability to the Central Freeway.

Additionally the Regional Transportation Plan (RTP) sets forth a ten year plan for other projects not fully funded via the STIP or federal Surface Transportation Program and Congestion Mitigation and Air Quality funds. The current list of projects for the City and County of San Francisco is cited in Table 6. Reprogramming the funds from this list of projects would also require the downsizing, delay or elimination of certain projects. More importantly, the County's priority list includes the region's highest percentage of transit projects. To shift the funding priorities for the RTP, the Board of Supervisors and the Metropolitan Transportation Commission would have to concur that the Central Freeway is a higher priority.

**D. Surplus Land Sales**

In March, 1990, Senator Kopp introduced a bill that significantly improved the funding capabilities of the Embarcadero Roadway. SB 181 allowed the City of San Francisco to remove State Highway Route 480 from the state system, assume all liabilities and responsibilities associated with that roadway, and turned over to the city the right of way that had previously been required as part of the roadway structure. The bill placed two conditions on this transaction:

First, the bill required that the sale, disposition or "net proceeds" of the property be used to fund the replacement project. It was assumed that this condition applied to the construction costs of the project. However, discussions are still outstanding as to whether this restriction could also include the maintenance costs of the project. In other words, perhaps it might be possible to develop a particular parcel and use the development proceeds as an annual maintenance fund for the project.

table 7

Second, the bill required that the Embarcadero Roadway replacement project provide "comparable capacity" relative to the original transportation project. This restriction is a significant issue in the definition of replacement projects. It is clear that Caltrans does not view a purely local street improvement project as part of their responsibility. Moreover, if a replacement project is to receive ER funds, it must demonstrate its capacity and connectivity to other segments of the State system. It should be noted, however, that the concerns regarding comparable capacity reflect the State' objectives and do not constitute a federal requirement for ER funding.

Assuming the City is successful in obtaining legislation similar to SB 181, the net proceeds of alternative land sales could reduce the construction costs of the project. The Central Freeway Alternatives provide varying amounts of surplus right of way. Table 7, Impacts of the Proposed SB 181 Legislation, approximates the sales revenue that might accrue to the project, given the comparable sales information cited. These estimates assume that adjacent zoning would apply. Comparable sales information provided to Pittman & Hames by the San Francisco Department of Real Estate indicates values of approximately $55 per square foot for residential square footage and $90 per square foot for commercial square footage.

As the table indicates, estimates of net proceeds were developed for the area between of Fell and Grove Streets. That group of parcels, which will be transferred regardless of the alternatives that will be selected, could generate as much as $4.6 million in land sales. The remaining alternatives are estimated to generate between $1.2 million and $20.0 million, as shown on Table 7.

It should be noted that the financial planning for the waterfront transportation projects assumes that the SB 181 wording of "net proceeds" includes ground leases as well as sales. The determination of approximate lease revenues accruing to the City as a result of long term leases would be dependent upon the type and negotiated requirements of varying development and land uses. The determination of potential lease revenues was beyond the scope of this study, but should be considered following the selection of a preferred alternative.

### E. Seismic Retrofit Program

Another funding source possible for this project is state seismic retrofit funds. There are two potential sources of seismic funding available via the State of California. These include the current allocation of state seismic improvement funding contained in the State Transportation Improvement Program (STIP) and the Regional Transportation Plan (RTP), cited in previous pages. Allocating funds from the State's existing seismic program to the Central Freeway would, no doubt, require the delay of currently programmed projects located outside of San Francisco. However, the State is currently

considering new seismic funding sources that would increase the overall funding for these types of projects.

New legislation, SB 146, The Seismic Retrofit Bond Act of 1996, proposes $2 billion in additional state general obligation bonds for the seismic retrofit of state-owned highways and bridges throughout the state. The bill is proposed for voter consideration later this year. The bill currently specifies that $650 million would be used to upgrade toll bridges; the remaining funding would be available to state approved projects.

**F. San Francisco County Transportation Sales Tax Funding**

Prior to the Loma Prieda Earthquake in 1989 San Francisco County voters passed legislation establishing the 1/2 cent transportation sales tax. The sales tax appeared on the ballot as Proposition B and established a 20 year funding program for a list of transit, roadway, transportation systems management (TSM), and paratransit projects and programs. The existing sales tax program is the single largest source of federal and state transportation grant matching funds within San Francisco.

The voters of San Francisco not only approved the sales tax ordinance in 1989, they also approved an Expenditure Plan that established a two-tier list of project categories and subcategories. The project categories and subcategories, originally approved by the voters, included the list cited on the following page in Table 8.

The delineation between categories, subcategories and individual projects included within each subcategory is a significant point of debate with regard to the Central Freeway. The Central Freeway could only be eligible for funding under the 30% Street & Traffic Safety category as a major capital project, similar to the Embarcadero Roadway. However no Central Freeway project was included and all of the funding established under that category and subcategory has been allocated to other existing projects.

The San Francisco County Transportation Authority (SFCTA) is currently in the process of updating their Strategic Plan. The plan specifies the Authority's intent to fund a finite list of projects over a 10 year period. In preparing the update of this ten year plan, new sales tax revenue projections were prepared. The current projections indicate an 11% decline in sales tax revenue over the original total forecast of $902 million over the 20 year life of the program. The new estimates have reduced total anticipated revenue to approximately $803 million. This decline is the result of the recent California and City of San Francisco economic recessions, actual growth rate losses between 1990 and 1995, and a downward revision of the anticipated growth in the economy (from an original estimate in 1989 of 1.3% per year to a projected 1.0% for the duration of the plan.)

In 1989 the voters approved a prioritization of projects that included an assumption that 60% of the projects would be transit improvements, 30% would be allocated to roadways, 8% allocated to the City's paratransit program, and 2% set aside for transportation system

management (TSM) projects. The Draft Strategic Plan has been redesigned to include the changes in growth assumptions, as well as a focus to deliver as many projects to the voters as quickly as possible. As a consequence, the ten year plan includes a shift from the 60%/30%/8%/2% split required by the voters, to a 56%/34%/8%/2% split which will be corrected (and brought into conformance with the original allocations) in the later years of the program. The current list of projects included under the Streets and Traffic Safety Category of the Draft Strategic Plan are included in Table 7, provided in a subsequent page.

In addition to the projected decline in anticipated revenues, the SFCTA program also includes a shortfall of approximately $80 million (in escalated dollars) over the next 10 years. That shortfall represents the amount of funds that the Authority will have to finance to meet the proposed commitments contained within the recommended list of projects.

**Table 8: 1989 Sales Tax Expenditure Plan Allocations**

| Category/Subcategory | Original 1989 Allocation | % Total |
|---|---|---|
| **TRANSIT** | **$541** | **60%** |
| Service Enhancements | 141 | |
| Corridor Construction | 200 | |
| Rehab/Replacement | 200 | |
| | | |
| **STREETS & TRAFFIC** | **$271** | **30%** |
| Street Resuf/Recon | 142 | |
| Signals/Signs | 67 | |
| Major Capital Projects | 50 | |
| Street Tree Program | 12 | |
| | | |
| **PARATRANSIT** | **$ 72** | **8%** |
| | | |
| **TSM** | **$ 18** | **2%** |
| Rideshare/Transit Pref. | 12 | |
| Bike/Pedestrian | 6 | |
| **TOTAL** | **$902** | **100%** |

Acquiring sales tax moneys for this project will also be an uphill battle. In researching this funding source, questions remain with regard to the Central Freeway's eligibility for Proposition B sales tax dollars. If there had been an understanding of the project's requirements in 1989, the project might have been a component of the Expenditure Plan. Current circumstances, however, dictate the following considerations:

Table 7

**IMPACTS OF PROPOSED LAND SALES**

| Alternative Name | Total Available Sq.Ft. | Estimated Zoning Shares | | Sq.Ft. by Zone | | Range of Sale Values ($/Sq.Ft.) | | Projected Sale Revenue | Total Sale Revenue |
|---|---|---|---|---|---|---|---|---|---|
| | | Resid. | Comm. | Resid. | Comm. | Resid. | Comm. | | |
| 1. Double Deck Retrofit | 22,000 | 100% | | 22,000 | - | $55.00 | $90.00 | $1,210,000 | $5,828,318 |
| 2. Single-Deck "Hybrid" Retrofit | 22,000 | 100% | | 22,000 | - | $55.00 | $90.00 | $1,210,000 | $5,828,318 |
| 3. Low-Deck Alternative | 125,000 | 85% | 15% | 106,250 | 18,750 | $55.00 | $90.00 | $7,531,250 | $12,149,568 |
| 4. Deep Tunnel | 238,000 | 80% | 20% | 190,400 | 47,600 | $55.00 | $90.00 | $14,756,000 | $19,374,318 |
| 5. Street Reversal | 170,000 | 85% | 15% | 144,500 | 25,500 | $55.00 | $90.00 | $10,242,500 | $14,860,818 |
| 6. South Van Ness Ramps | 276,000 | 50% | 50% | 138,000 | 138,000 | $55.00 | $90.00 | $20,010,000 | $24,628,318 |
| **Fell St. to Grove St. Parcels** | 74,489 | 80% | 20% | 59,591 | 14,898 | $55.00 | $90.00 | $4,618,318 | |

Sources: San Francisco Departments of City Planning and Real Estate; Pittman & Hames Associates.

a. The SFCTA's Commission has never sought to amend the Expenditure Plan. No situation has yet arisen where funds were seriously considered for a project that was not on the list, or which could not be accommodated within the individual funding categories, i.e. replacing one street resurfacing block for another.

**Table 9: Draft Strategic Recommendations for Streets and Traffic Safety FY 94/95 Through FY 03/04**

| Projects | Priority Ranking | Amount Allocated (in 000's) |
|---|---|---|
| **Street Resur/Reconstructions** | | $ 137.2 |
| Street Resurfacing | 1 | 2.1 |
| Seismic Reinforcement | 1 | 3.8 |
| Railroad Track Removal | 2 | 7.3 |
| Sidewalk Repair | 2 | 12.8 |
| Street Repair/Clean Up | 2 | |
| Subtotal | | **$ 163.2** |
| **Traffic Signals/Signs** | | |
| Signal Upgrades | 1 | 52.0 |
| Street Name Signs | 1 | 1.0 |
| Lane Markings | 2 | 0.8 |
| New Traffic Signals | 2 | 5.6 |
| Traffic Control Signals | 2 | 0.8 |
| Traffic Engineering Equip. | 2 | 1.2 |
| Army Street Circle | 2 | 0.1 |
| Portrero Avenue | 2 | 0.0 |
| Subtotal | | **$ 61.5** |
| **Major Capital Projects** | | |
| Embarcadero Roadway | 1 | 22.5 |
| 19th & Holloway Improvements | 1 | 0.0 |
| Candlestick Park Traffic | 1 | 1.0 |
| Bernal Heights System Upgrades | 2 | 6.0 |
| Hunters Point Connector | 2 | 0.0 |
| Crossover Drive: GGP | 2 | 0.0 |
| 3rd Street Median | 2 | 0.0 |
| Subtotal | | **$ 29.5** |
| **Street Trees** | | |
| Planting | 1 | 4.2 |
| Maintenance | 1 | 7.5 |
| Subtotal | | **$ 11.7** |
| **TOTAL STREETS & TRAFFIC SAFETY** | | **$ 265.8** |

b. Portions of the Central Freeway alternatives may be eligible for currently programmed projects within the existing Expenditure Plan. For example, street trees, street lighting, and roadway resurfacing project elements would be allowed under the current list of voter-approved projects.

c. The Commission has the authority to reprogram funds within the categories of the Expenditure Plan, but does not have explicit authority to add major projects to the Plan. If the Commission expressed an interest in amending the Expenditure Plan, a legal ruling would be required to determine whether such an action would necessitate voter approval of a revised Plan.

d. Although other Northern California Transportation Authorities have amended their Expenditure Plans, the ordinance approved in San Francisco was far more detailed and explicit with regard to individual projects and project categories.

e. Assuming a positive ruling from the Commission and legal counsel, the inclusion of any funding for the Central Freeway in the sales tax program would necessitate the elimination of another project or program. Within the category of Streets and Traffic Safety, Major Capital Programs, most of the funds have already been allocated to the Mid-Embarcadero Project (approximately $22 million programmed through FY95/96 out of a total category budget of $29 million). The remaining funds programmed for this decade only include another $2.7 for the Bernal Heights Street System Upgrade Project. Acquisition of additional funding would require the use of other categorical money, i.e. road resurfacing, street trees, and traffic signals/signage.

In summary, the use of this declining revenue source will be very difficult and necessitates an independent legal ruling. However, assuming the clearing of these difficult, if not impossible, hurdles and Commission concurrence, funds within the subcategories of Streets and Traffic Safety do exist in sufficient amounts to provide all or a portion of local match required for the Central Freeway alternatives.

## G. Regional Gas Tax

The Metropolitan Transportation Commission is currently considering the introduction of a new regional tax to support the area's transportation needs. One of the most promising revenue sources is either a regional or statewide sales tax levied on fuel. Currently the California Constitution prohibits the allocation of gas tax revenues for transit operating and maintenance needs. This tax is proposed as a sales tax on fuel versus a gas tax. Although this interpretation may be open for future court rulings, it does open the window for fuel related revenues to be used for roadway as well as transit operations purposes.

The revenues that might be generated by this tax are estimated to be $250 million per year. The Bay Area Partnership, a consortium of transportation agency staff, business and community leaders, has proposed this new tax as a way to address the on-going declines in state and federal transportation funding. The Partnership estimates that the Bay Area is facing a 20 year transportation funding crisis that consists of a $1 billion shortfall to operate existing public transit services, a $2 billion shortfall to repair local streets and roads, and the regional share of the State's projected $5 billion shortfall for transit and highway expansion programs. To date, the allocation of these gasoline tax revenues has been guided by two principles. First, the region will return 95% of the revenues back to the jurisdictions. The remaining 5% will by used by MTC to support regional capital projects as recommended by MTC staff and the MTC Commission. Second, the funds will be returned to the counties based on population totals. Assuming both of these allocation principles remain in place, San Francisco could hope to obtain approximately $27 million per year in new transportation revenues. This represents approximately 12% of the regional total.

Estimating when these potential revenues would become available to the region and/or San Francisco is very speculative at this time. The legislature would first have to pass enabling legislation on SB877. The sales tax would then have to be approved by a majority of local voters. In addition to these procedures, it is possible that a court might rule a constitutional amendment is required to address prohibition against the use of gas tax revenue for transit operating purpose. Regardless of these hurdles, this alternative is still the most likely regional revenue measure that might be approved in the near term. This is primarily because all nine counties are currently projecting significant transportation need shortfalls.

This proposed legislation would give the City of San Francisco flexibility as to whether the funds would be used for capital or operating purposes. Because the City is facing major transit operating deficits, these funds have been looked upon as a way to address Muni's current budget crisis. If, however, the Central Freeway alternative has been selected and defined more specifically, it may be possible to set aside a portion of this regional source for the replacement project. It should be noted, however, given the time required to develop the proposal, promote it to the public, and schedule it on the ballot, revenues would probably not be available until at least FY 1997-98, excluding potential court challenges, and assuming a positive vote of the people in the November 1996 general election.

### H. General Fund

The Mayor's proposed 1995-96 fiscal year budget for the City and County of San Francisco totals $2.9 billion. Of this, $998 million is budgeted for public works, transportation, and commerce. The 1995-96 San Francisco Budget shows a General Fund allocation of $1.4 billion. Measured in constant 1993-94 dollars, the San Francisco

General Fund has remained nearly constant since fiscal year 1993-94 at about $1.3 billion.

A total of $940 million of the 1995-96 General Fund is allocated for voter, legal, and state and federal government mandated costs, leaving $503 million for discretionary spending. Of this amount, $41 million has been allocated for public works and capital spending. Another $29 million is to be put aside for reserves. These amounts are shown in the accompanying Figure 1.

Due to the constraints currently placed on the City's general fund and the lack of a precedent in general fund allocations toward the Embarcadero Project, this source is not considered feasible for the Central Freeway.

**I. Statewide Trades**

Another source of funding potentially available to this project is the use of "traded" state funds. If another jurisdiction has access to a sufficient source of funding that it cannot use, e.g. state rail bond funding, those funds could be traded to a jurisdiction requiring rail funds. This situation has existed for the City of Sacramento. Plans are moving forward to trade Sacramento rail bond funds to San Francisco in exchange for flexible STIP funding. Due to delays in Sacramento's rail development plans, the trade of restricted funds (rail bond moneys) for non-restrictive funds was worth paying a penalty. In this case the "penalty" was the difference from receiving $0.83 on the dollar.

The Central Freeway, however, requires roadway funds. Unlike rail bond moneys, this type of funding is in highest demand in California at this time, making a trade for encumbered moneys very difficult. However, following selection of a preferred alternative, all counties and Caltrans should be consulted to determine possible sources of funding for a project that has been halted or delayed.

**J. Special Federal Demonstration Funding**

If all previous sources of funding prove inadequate, a final resource is the pursuit of special federal transportation demonstration grant funds. This type of grant funding is currently very unpopular but does still exist. Demonstration grant funds are annually earmarked in Congress to meet local constituency needs. Following the selection of a preferred alternative, all project elements of the selected alternative should be reviewed to determine whether or not a portion of the alternative could be justified as a federal demonstration project.

**Figure 1**

It should be noted that reliance upon this source will require the full cooperation and enthusiastic support of all San Francisco congressional legislators. In particular, Senator Feinstein's support would be pivotal. Over the next two years, Congress will begin to structure the reauthorization of the Intermodal Surface Transportation Efficiency Act (ISTEA). This seven-year bill will incorporate special demonstration project funding earmarks and may be an excellent potential funding source for a portion of the Central Freeway.

## V. Preliminary Conclusions

In summary, there are no apparent sources of revenue that can easily be tapped for the selected Central Freeway alternative. The most obvious strategy is the immediate pursuit of additional federal Emergency Relief funding in excess of the remaining $27.0 million funding cap. Given current cost estimates, projected funding shortfalls and match requirements are as follows:

**Table 10: Estimated Funding Shortfalls**

| Central Freeway Alternatives | Estimated Construction Costs (millions) | Projected Federal Shortfall by Funding Availability | | Match Requirements by Funding Availability | |
|---|---|---|---|---|---|
| | | | Existing $27.0 M | | Existing $27.0 M |
| 1. Double Deck Retrofit | $ 45 -50 | $ 15.3 | $ 19.55 | $2.7 | $ 3.45 |
| 2. Single Deck "Hybrid" Retrofit | $ 65 | | $ 32.3 | | $ 5.7 |
| 3. Low Deck Alternative | $ 75 | | $ 40.8 | | $ 7.2 |
| 4. Deep Tunnel Alternative | $ 145 | | $ 100.3 | | $ 17.7 |
| 5. Street Reversal Alternative | $ 85 | | $ 49.3 | | $ 8.7 |
| 6. South Van Ness Ramps Alternative | $ 105 | | $66.3 | | $ 11.7 |

In summary this report recommends reliance upon federal Emergency Relief funds for 85 percent of the Central Freeway's replacement costs. If the Northern California Congressional delegation was not successful in obtaining the full amount of these funds

required by the selected alternative, the next logical source would be the reprogramming of existing projects in the STIP's seismic program. Potential sources of local match resources include land sale revenues, new seismic retrofit funds, regional gas tax funds, and a very small portion of eligible sales tax funds. Pursuit of other funding sources in this report would be recommended only if any of the optimistic sources cited did not materialize in the amounts anticipated.

Following the selection of the preferred alternative, the next financial phase for the Central Freeway should include a detailed analysis of the individual project elements of the alternative and the recommendation of funding sources suited to each element.

# TECHNICAL MEMORANDUM #9
## Alternatives Comparison

# Central Freeway
# AREAWIDE TRAFFIC STUDY

prepared for

SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

**DEPARTMENT OF PARKING & TRAFFIC**
**CITY AND COUNTY OF SAN FRANCISCO**

WSA

**WILBUR SMITH ASSOCIATES**

Revised: August 24, 1995

# EVALUATION OF ALTERNATIVES

## INTRODUCTION

This technical memorandum evaluates the alternatives described in Technical Memo #5 according to the criteria developed in Technical Memo #3. The criteria outlined in Technical Memo #3 were based on those developed by the Study Task Force, supplemented by the Consultant. The evaluation is summarized in the attached evaluation matrix of Table 1 and is described in the text to provide source references and additional material where required. Quantitative factors such as cost are tabulated directly. Qualitative factors are indicated as follows, with a short written explanation as to why they were so rated:

(++) = Very positive
(+) = Positive
(•) = No significant impact
(-) = Negative
(--) = Very negative
(FF) = "Fatal Flaw"

Since different interested parties tend to have differing priorities, the criteria are neither prioritized nor weighted.

The criteria described in Table 1 of Technical Memo #3 were followed as closely as possible. However, some additions, deletions or revisions in the listing were made for the following reasons:

1. Where required to simplify the table and facilitate understanding;

2. Where required to describe more accurately the data actually obtained; and

3. Where criteria do not vary between alternative or, at this point in the analysis, no significant differences could be ascertained.

All seven alternatives described in Technical Memorandum #5 (Study Alternatives) are included in the analysis. However, Alternatives #4 (Deep Tunnel) and #7 (10th Street Tunnel) were not analyzed to the same level of detail as the others and are, therefore, not rated in as many categories as the others.

Results of this analysis will be used as input to Technical Memo #10, the consultant's recommendation of a preferred alternative.

Table 1
(Page 1 of 3)
ALTERNATIVES COMPARISON

| Factor | (1) Double-Deck Retrofit | (2) "Hybrid" Retrofit | (3) Low Deck | (4) Deep Tunnel | (5) Street Reversal | (6) South Van Ness Ramp | (7) 10th Street Tunnel |
|---|---|---|---|---|---|---|---|
| **Visual** | | | | | | | |
| Length of Elevated Structure | old: 6,650 feet<br>new: 0 feet | old: 4,140 feet<br>new: 2,510 feet | old: 3,370 feet<br>new: 2,020 feet | old: 2,880 feet<br>new: 1,320 feet | old: 0 feet<br>new: 4,900 feet | old: 0 feet<br>new: 7,620 feet | Not Available |
| Views down Market St. | Worst (--) | Blocked (-) | Blocked (-) | Open (++) | Open (++) | Open (++) | (Open (++) |
| Octavia Corridor | Worst (--) | Better (-) | Open Cut (-)<br>Partial Deck (+) | Best (++) | Surface (+) | Surface (+) | Surface (+) |
| Other Areas | Existing (•) | Existing (•) | Existing (•) | Same (+) | New ramp at Costco (-) | New elevated on S. Van Ness (--) | New tunnel in Civic Ctr. (--) |
| **Neighborhood Impacts** | | | | | | | |
| Hayes Valley | Splits Octavia Corridor (--) | Splits Octavia Corridor (--) | Can tie corridor together depending on design (+) | Ties neighborhood together (++) | Gets rid of structure. Increases Octavia traffic (+) | Same as (5) (+) | Same as (5) (+) |
| South of Market | Existing (•) | Existing (•) | Minimal impact (•) | Minimal impact (•) | Increases traffic on Market St. (-). | Structure on S. Van Ness (-) | Increases traffic on Market St.(-) |
| Tenderloin/Civic Center | Existing (•) | Existing (•) | Minimal impact (•) | Minimal impact (•) | Increases traffic (-). | Increases traffic (-) | Structure on Hayes (--) |
| **Other Modes** | | | | | | | |
| Market Street Transit | Minimal impact (•) | Minimal impact (•) | Minimal impact (•) | Minimal impact (•) | Minimal impact (•) | Less Market St. through signal timing (-) | Minimal impact (•) |
| Mission Street Transit | Existing (-) poor | Same as existing (-) | Reduces Mission St. traffic (+) | Reduces Mission St. traffic (+) | Reduces Mission St. traffic (+) | Adds traffic to S. Van Ness/ Mission Intersection (--) | Not Available |

(++) = Very positive; (+) = positive; (•) = no significant impact; (-) negative; (--) very negative; (FF) = fatal flaw.

Table 1
(Page 2 of 3)
ALTERNATIVES COMPARISON

| Factor | (1) Double-Deck Retrofit | (2) "Hybrid" Retrofit | (3) Low Deck | (4) Deep Tunnel | (5) Street Reversal | (6) South Van Ness Ramp | (7) 10th Street Tunnel |
|---|---|---|---|---|---|---|---|
| **Other Modes (continued)** | | | | | | | |
| Haight/Page Streets | Existing (•) | Existing (•) | Existing (•) | Existing (•) | Existing (•) | Existing (•) | Existing (•) |
| Changes to Current Transit | None (•) | Minor (-) | Minor (-) | Minor (-) | Major (see text) (--) | Moderate (-) (see text) | Minor (-) |
| Compatibility with Proposed Transit | OK (•) | OK (•) | OK (•) | OK (•) | Reduces Van Ness traffic (+) | OK (•) | OK (•) |
| Bicycle/Pedestrian | Existing (•) | Existing (•) | No significant impact (•) | No significant impact (•) | Increased traffic on Polk, Larkin, Market & Page Streets. (-) | Traffic increases & decreases on bike routes are fairly equal (•) | Not Available |
| **Traffic** | | | | | | | |
| Vehicles/Lane Crossing Market Street At-Grade | 389 | 389 | 370 | 370 | 459 | 468 | Not Available |
| Key Intersections at Levels of Service E&F | E - 5<br>F - 2 | E - 5<br>F - 2 | E - 0<br>F - 3 | E - 0<br>F - 3 | E - 3<br>F - 1 | E - 2<br>F - 3 | Not Available |
| Queues on Central Freeway | To Mission St. | To Mission St. | None | None | At South Van Ness Off-Ramp | to Ninth Street Off-Ramp | Not Available |
| Traffic Increases on Surface Streets<br>• >20%<br>• >50% | Same as current (•) | Same as current (•) | Minor variation (•) | Minor variations (•) | Major increases (--) | Significant increases(-) | Not Available |
| Maintains Traffic over Market St. during Construction | Probably (++) | Probably; some periods of stoppage (+) | No (-) | No (-) | No (-) | No (-) | No (-) |

(++) = Very positive; (+) = positive; (•) = no significant impact; (-) negative; (--) very negative; (FF) = fatal flaw.

Table 1
(Page 3 of 3)
ALTERNATIVES COMPARISON

| Factor | (1) Double-Deck Retrofit | (2) "Hybrid" Retrofit | (3) Low Deck | (4) Deep Tunnel | (5) Street Reversal | (6) South Van Ness Ramp | (7) 10th Street Tunnel |
|---|---|---|---|---|---|---|---|
| **Environmental Impacts** | | | | | | | |
| Noise | Existing (-) | Improved (+) | Selected significant impacts (--) | Best (++) | Significant impacts (-) | Significant impacts (-) | Not Available |
| **Construction Impacts** | | | | | | | |
| Est. Time of Const. (Months) | 30 | 33 | 36 | 36 | 31 | 28 | Not Available |
| Impacts on Community | Significant (-) | Significant (-) | Major (--) | Significant (-) | Significant (-) | Major (--) | Major (--) |
| Traffic Impacts | Probably Minor (+) | Probably Minor (+) | Major (--) | Major (--) | Major (--) | Major (--) | Not Available |
| **Financial Implementation** | | | | | | | |
| Capital Cost | $45-50 million | $65 million | $70-75 million | $145 million | $85 million | $105 million | Not Available |
| Time to Completion | 5 years | 5¼ years | 7 years | 7 years | 8 years | 7¾ years | Not Available |
| Developable Land Created South of Fell Street | 0.5 acres | 0.5 acres | 1.8 acres (2.9 acres with deck) | 5.5 acres | 3.9 acres | 6.3 acres | 3.9 acres |
| **Safety** | | | | | | | |
| Seismic | Greater Risk (--) | Greater Risk (--) | OK (+) | OK (+) | OK (+) | OK (+) | OK (+) |
| Design Standards | Existing (•) | See text (•) | See text (•) | See text (•) | See text (•) | See text (•) | See text (•) |

Legend:

(++) = Very positive; (+) = positive; (•) = no significant impact; (-) negative; (--) very negative; (FF) = fatal flaw.

Wilbur Smith Associates; August, 1995

# NOTES TO EVALUATION MATRIX (TABLE 1)

## Visual Criteria

1. **Length of Elevated Structure:** This indicates how much of the existing elevated structure would remain or new elevated structure is created. Lengths were scaled off drawings between where the Central Freeway crosses Bryant Street and its terminus to the north.

2. **Views down Market Street:** This measures the level of "openness" looking from west of the structure down to the Ferry Building. Stevens & Associates prepared drawings of this view that were presented at the Task Force meeting of August 21.

3. **Octavia Street Corridor:** How views across and along the Octavia Street corridor between Market and Fell Streets are likely to be affected by the alternatives. Again, Stevens & Associates prepared sketches of the Octavia Street corridor shown on August 21.

4. **Other Areas:** Alternatives 5, 6 and 7 require structures in areas outside the current freeway corridor. The impact of these structures is evaluated in the table. Perspective sketches of these structures have not been prepared.

## Neighborhood Cohesion

Neighborhood cohesion is a very subjective category. The impacts are subdivided into three areas: Hayes Valley, South of Market Street and Tenderloin/Civic Center (see Figure 1). The analysis generally focuses on whether physical, visual or traffic barriers are created or removed under the various alternatives.

1. **Hayes Valley:** Generally, the impact of the changes is greatest along the current freeway corridor. Removal of the freeway structure would create an obvious benefit. Alternative 3 puts the structure mostly underground, which has visual and noise benefits. The barrier it creates with an open cut could be significantly mitigated by decking over as much of the roadway as possible (only the area between Page and Haight Streets would qualify). Alternatives 5, 6, and 7 have the roadway at grade, thereby providing the best visual ties. But a fairly minor street (Octavia) would be replaced by a heavily trafficked street so some of the visual benefits would be offset by a functional barrier.

2. **South of Market:** Alternatives 1-4 have very little impact on the South of Market area. Alternative 5 has the most impact because of its street reorientation that generally brings more traffic through the area and reallocates traffic differently than it does now. Alternative 6 creates a significant structure in the South Van Ness Avenue area that

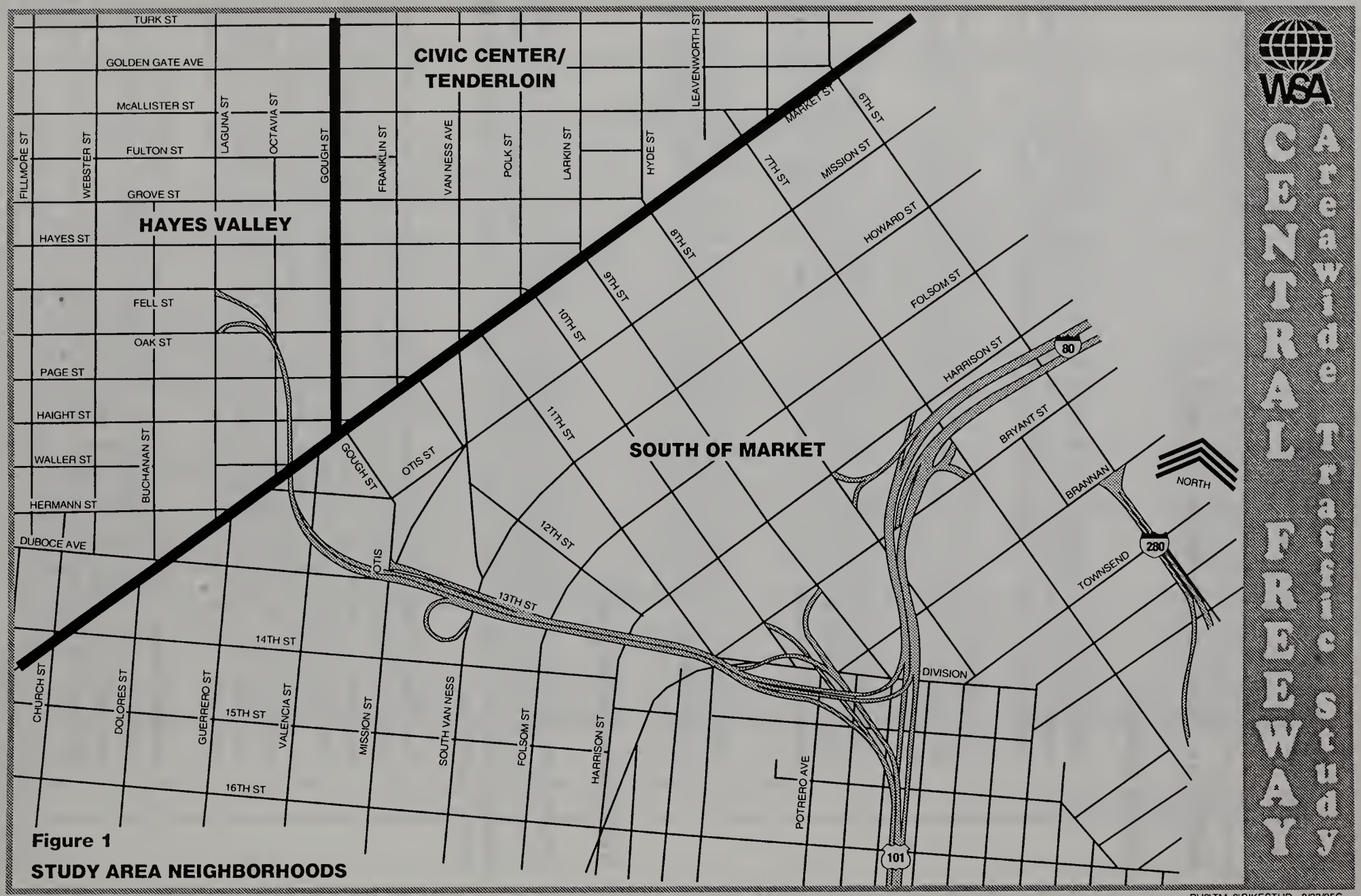


**Figure 1**

**STUDY AREA NEIGHBORHOODS**

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would have major impact on adjacent businesses but is generally in a non-residential area.

3. **Tenderloin/Civic Center:** With the exception of Alternative 7, no significant physical changes would be made in these areas. However, traffic increases will occur in all alternatives that reduce capacity along the Central Freeway.

## Impact on Other Modes

All of the alternatives were designed to have minimal impact on current transit service (depicted in Figure 2). In all cases, the street network for transit routes is unchanged so the only real impacts are caused by traffic variations on transit route streets or streets intersecting transit routes. Traffic signal timing for streets crossing Market Street east of Haight Street was assumed to remain constant (with the exception of Alternative 6 at Franklin Street) to protect the movement of transit along Market Street. West of Haight, transit consists of only the "F" line, which would run at less frequent headways and could have signal preemption capabilities; so signal timings across Market in this section were re-examined.

1. **Market Street Transit:** As previously stated, all alternatives protect the integrity of Market Street transit so there is little difference between the alternatives except for Alternative 6. Alternative 6 adds a crossing of Market Street at Franklin Street, decreasing Market Street "green time" by one-third and, therefore, having a negative impact on Haight Street buses.

2. **Mission Street Transit:** Most of the alternatives decrease traffic on Mission Street in the important link between the Central Freeway and South Van Ness Avenue and so would have a positive impact on movement of the #14 buses. The exception is Alternative 6 which brings more traffic into the congested Mission/South Van Ness Avenue intersection.

3. **Haight/Page Transit:** Neither of these streets is changed in any of the alternatives. Alternatives 5, 6, and 7 which increase traffic along Octavia Street are likely to slow bus movement on Page and Haight Streets since traffic signals with limited "green time" would be required. However, this is a fairly minor impact. A more major impact is the signal timing in Alternative 6 described above in the discussion of Market Street.

4. **Changes to Current Transit:** This category includes physical or operational changes that would be required in current routes both during and after construction. Alternative 1 would have almost no changes; possibly trolley wire would have to be rehung on Page and Haight streets during the retrofit. Alternatives 2 and 4 would definitely require rehanging of the wire, with minor disruption in service during construction. Alternative 3

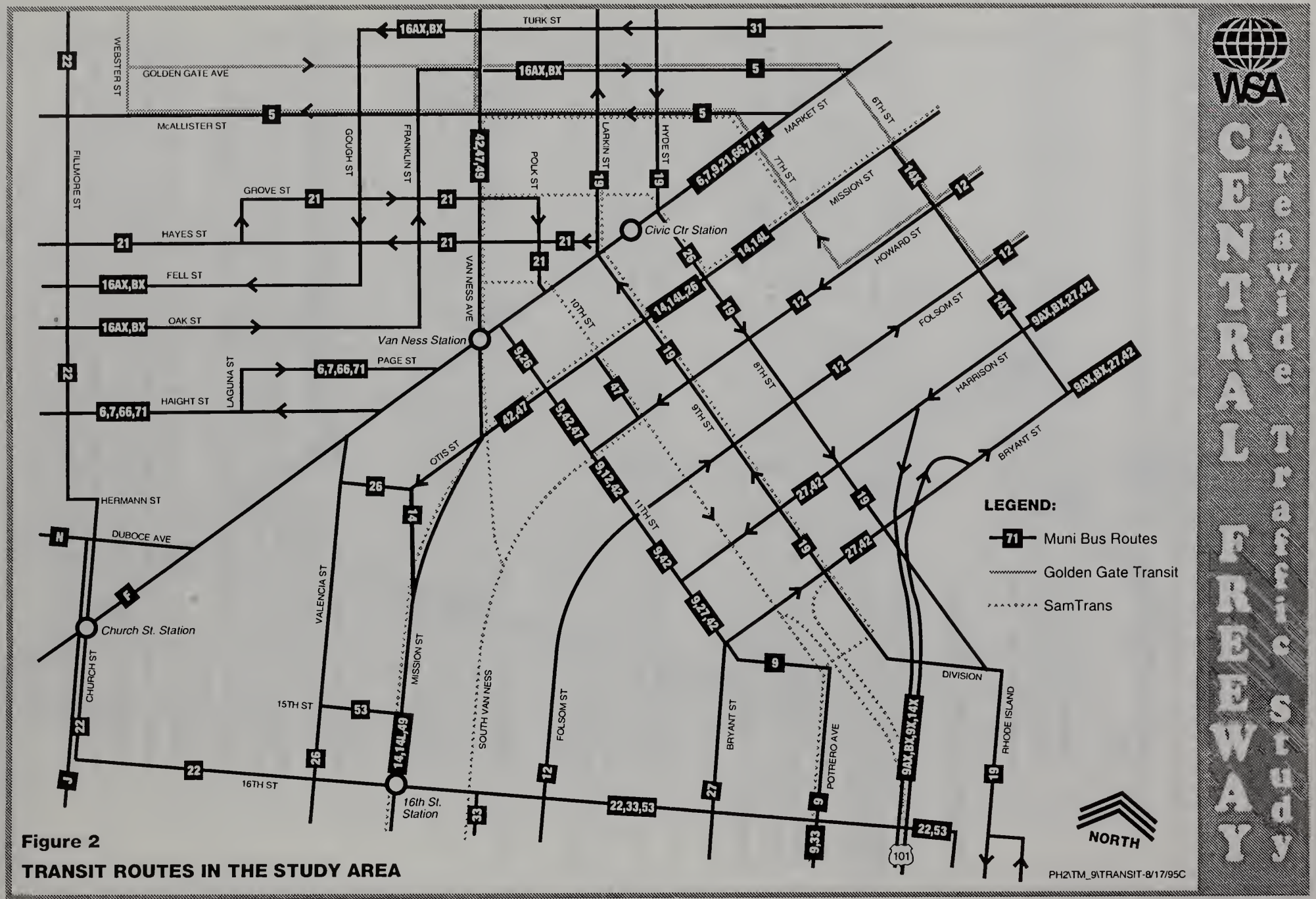


**Figure 2**

**TRANSIT ROUTES IN THE STUDY AREA**

would have somewhat more of the same disruption during construction because of street closures in that period along the Octavia Street corridor.

The changes caused by street reversal would cause the largest change in transit service, including:

i. Reversal of routing and stops of the #19 bus along Eighth, Ninth, Hyde, Grove and Larkin Streets.

ii. Reversal of routing and stops for SamTrans along Ninth, Tenth, Grove and Fell Streets.

iii. Reversal of routing, stops, and possible rehanging of trolley wire for the #21 bus on Hayes and Grove Streets.

Alternative 6 would cause particular disruption to the #14, 42 and 47 buses during construction.

5. **Compatibility with Future Transit:** The only significant identified possible transit change in the area is MUNI's proposal to look at exclusive transit lanes on Van Ness Avenue. None of the alternatives preclude this from happening, although it would be facilitated by decreasing traffic on Van Ness Avenue so that traffic could be handled more easily. Alternative 5 decreases volumes to some degree, so it could have a positive impact.

6. **Bike and Pedestrian Impacts:** The recently submitted (though not yet officially adopted) bicycle plan has bicycle routes on the following streets in the corridor: Howard Street, Folsom Street, Division Street, Seventh Street, Eleventh Street, Market Street, Polk Street, Larkin Street, Turk Street, Golden Gate Avenue, and Page Street (see Figure 3). Significant increases or decreases of vehicular traffic on these routes are noted.

   Pedestrian impacts tend to be very localized and are, therefore, difficult to evaluate on any grand scale in this study. Any adverse pedestrian impacts resulting from the selected alternative would need to be mitigated in subsequent design and planning.

## Traffic

More detailed explanation of these factors is given in Technical Memorandum #6 on Traffic.

1. **Vehicles/Lane Crossing Market Street:** The Market Street screenline analysis shown in Technical Memorandum #4 indicated that with current configuration there was about a 5 percent excess capacity in the PM peak hour for traffic to cross Market Street at-

**Figure 3**
**BIKE ROUTES**

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grade between 6th and Duboce Streets. This table compares the number of vehicles needing to cross Market Street at-grade divided by the number of lanes available for the crossing under each of the alternatives. It shows a 5 percent decrease for Alternative 3 with an increase of from 18 to 20 percent for Alternatives 5 and 6. Thus, even though more lanes are available in the latter alternatives to make the crossing, they do not make up for the increased traffic that currently crosses Market Street on the Freeway.

2. **Key Intersections at Levels of Service E and F:** These levels generally denote unsatisfactory delays at intersections, with LOS F being worse than LOS E Of the 18 intersections chosen for analysis in Technical Memorandum #6, the number indicated in this table are at unsatisfactory levels.

3. **Queues on Central Freeway:** This is based on output from the CORFLO model indicating how far the traffic is likely to be backed up by 6:00 PM, given constant flow over the time period.

4. **Streets Having Traffic Increases of more than 20/50 percent:** Since the livability of a street and property values are generally decreased when major traffic increases occur, it is important to note the location and extent of traffic increases in the area. Conversely, streets where traffic is decreased derive benefits. However, it can logically be argued that the increases are more significant than the decreases since it is more important to limit unplanned negative impacts than to provide "windfalls" for residents or businesses.

   The actual extent and location of traffic increases of 20 and 50 percent is shown in Technical Memorandum #6 (Traffic Operations). The overall impact is summarized in Table 1: for more detail the reader should refer to Technical Memorandum #6.

5. **Maintains Traffic over Market Street During Construction:** Alternatives 1 and 2 maintain a grade-separated crossing of Market Street during the construction period (although, less than existing capacity would be available during some phases of construction). The other alternatives do not permit this to happen. Our understanding is that Caltrans needs to work out the construction process in greater detail to ensure that traffic can be maintained on the structure, so "probably" rather than a definite yes has been indicated for Alternatives 1 and 2.

## Environmental Impacts

**1. Noise:** A noise study was performed by Shor Acoustical Consultants to determine general levels of noise impact for several proposed Alternatives for the Central Freeway Areawide Traffic Study. The Caltrans computer noise prediction program, SOUND32, was utilized to predict the noise levels from the freeway structure and from city streets. Noise measurements were performed in July 1995 to gain some understanding of the existing noise environment, including assessment of the contributions of the local traffic and reflections from the existing double deck freeway structure. Figure 4 indicates the locations where noise impacts were analyzed.

The existing noise environment along the freeway and along major city arterials already exceeds the Caltrans noise abatement criterion of 67 dBA.

Alternative 2 (high single-deck hybrid concept) will lower the noise levels compared to the existing due to the increased distance from receptors, the increased shielding provided by the edge of the roadway, and reduction/elimination of reflection effects. Noise levels at Receptors 4 through 7 and Receptor 10 will experience noise levels approaching or exceeding the 67 dBA criterion.

Alternative 3 (low single-deck freeway depressed north of Market Street) will increase noise levels compared to the existing. Despite the shielding provided by the edge of the retained cut, the roadway will be closer to the receptors. Noise levels will approach or exceed 67 dBA at all Receptors. At the street level, a marked increase in noise will occur on Oak Street between Laguna and Octavia, as vehicles access the freeway from Oak and not Laguna. Otherwise, there will be minimal change at other locations. Covering this block from Haight to Page will generate lower noise levels to Receptors 4 through 7.

Alternative 4 (deep tunnel under MUNI Metro) has not been modelled. Qualitatively speaking, there will be no noise impacts to Receptors 4 through 7, and perhaps minimal impacts at Receptors 8 and 9 with this Alternative due to the tunnel.

Alternatives 5 and 6 will result in noise impacts to all Receptors except Receptors 8 and 10. With the removal of the freeway north of Market, the street level traffic at Octavia will increase dramatically. The volume of traffic on Oak Street will still be significant, but not sufficient to keep noise levels above 65.5 dBA. At the street level, a marked increase in noise will occur on Octavia Street, as cars now access the freeway at Market Street.

It is important to note that the analysis is only a comparative type of analysis for each alternative and absolute design should be done at a later date.


**Figure 4**

**LOCATIONS OF MEASUREMENTS AND MODELLED RECEPTORS**

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## Construction Impacts

Construction impacts are a function of the intensity of construction, the length of time required and how much traffic disruption would occur and visibility. Technical Memo #7 (Construction) discusses these issues in detail.

**1. Estimated Construction Time:** The sequence and length of construction varies between the alternatives under consideration, and all will require road closures and diversion of local and/or freeway traffic for at least some periods during construction. It is a basic premise of Alternatives 1 and 2 that they would be constructed under traffic. As a consequence the schedule for construction will be extended in order to accomplish a detailed sequence of staged construction, including temporary works and partial freeway closures.

In contrast, it is anticipated that Alternatives 3 through 6, would have two distinct phases; a demolition phase for removal of redundant sections of the freeway, followed by a construction phase for the permanent works. Therefore, it would be necessary to close all, or portions of the existing Central Freeway to traffic, during both phases, and detour this traffic to the local street network. In addition, those local streets in the immediate vicinity of the demolition work would need to be closed, and traffic re-routed on a short-term basis.

Due to the restricted character of the site and the nature of Alternatives 3 through 6, the opportunities for the demolition and construction phases to proceed concurrently are limited. However, it would be possible for foundation work to commence behind the demolition process, with a lag period of 2-3 months to allow for clean up and possible utility relocations.

**2. Impacts on Community:** Alternative 1 would benefit by not requiring major demolition and a major level of construction, although the impacts would be far from trivial. Alternative 2 would require far more demolition and have a great level of visible construction activity since it involves major reconstruction of the existing deck. Alternative 3 would have even greater construction impact than 2 because it involves underground cut-and-cover work with demolition, excavation and shoring of the cut. Alternative 4 requires major work but a deep bore tunnel should have lesser community impact. Alternative 5 probably has the least impact because it mostly involves demolition and has new structures in primarily commercial areas. Alternative 6 has major construction impact in the South Van Ness Avenue area and so would have significant negative impact on businesses in the area during the construction period. Alternative 7 would have a significant impact on the Civic Center during construction of the tunnel.

**3. Traffic Impacts:** The extent of traffic rerouting during construction is discussed in Technical Memorandum #7. In general, significant rerouting is a part of all alternatives with the possible exceptions of 1 and 2 if they can be kept open during construction.

## Financial/Implementation

1. **Capital Cost:** The cost estimates include demolition, construction, right-of-way acquisition, engineering, traffic maintenance during staging and a 30 percent contingency.

2. **Time to Completion:** This indicates the forecasted number of years between the time of decision on a preferred alternative until the time it could be completed and open for traffic. This includes environmental impact studies, design, property acquisition and construction. Technical Memo #2 (Implementation Framework is a reference for assumptions regarding environmental documentation. It has been assumed that Alternatives 1 and 2 could be constructed with a negative declaration as the only environmental documentation. All other alternatives are assumed to require an EIS. It is also assumed that most design of the double-deck retrofit is already completed. Right-of-way acquisition time is estimated as 18 months.

## Safety

1. **Seismic:** The current structure between Fell and Mission Streets requires seismic retrofit and is obviously vulnerable to major future seismic events. Alternatives 3-7, which call for demolition of the existing structure, would provide the least seismic risk. Alternative 1 and Alternative 2 have more risk because they involve construction and maintenance of traffic on the existing structure. In addition, it is likely that an entirely new structure built to current seismic standards could be made more stable than a retrofit.

2. **Design Standards:** Neither the existing freeway nor any of the future alternatives meet current Caltrans freeway design standards, which are difficult to achieve in congested urban areas. In general, new sections would be designed as ramps, with lower design speeds, rather than as mainline freeway sections.

# TECHNICAL MEMORANDUM #10
## Preferred Alternative

# Central Freeway
# AREAWIDE TRAFFIC STUDY

prepared for

SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

**DEPARTMENT OF PARKING & TRAFFIC**
**CITY AND COUNTY OF SAN FRANCISCO**

WSA

**WILBUR SMITH ASSOCIATES**

August 1995

# PREFERRED ALTERNATIVE

## INTRODUCTION

This memorandum presents the recommendations of Wilbur Smith Associates regarding a preferred alternative for the Central Freeway Study.

The memorandum discusses the objectives of the study, how well the alternatives studied fulfill these objectives, and recommends the study alternative that best fulfills these objectives.

These recommendations are strictly those of Wilbur Smith Associates and its consultant team. They are not necessarily endorsed by our client: the San Francisco Department of Parking and Traffic, any other city agencies, the Citizen's Task Force, or Caltrans. However, it is hoped that all these groups can come to a consensus around a preferred alternative as this will make it easier to obtain the required funding and have a solution implemented as soon as possible.

## PROJECT GOALS AND OBJECTIVES

In looking at the extensive set of criteria used to evaluate the Freeway alternatives (see Technical Memorandum #9), it is useful to go back and examine the primary reasons that prompted the study in the first place.

The 1989 Loma Prieta earthquake resulted in damage to the Central Freeway, resulting in removal of traffic and eventual demolition of the elevated structure north of Fell Street. Shortening of the structure played an important part in the rebirth of Hayes Street, but created unsatisfactory traffic conditions at its current terminus at Oak and Fell Streets. Traffic increased on these streets because of poor alternative connections to and from the north while congestion on the Freeway and adjacent surface streets resulted from direct conflicts between traffic getting on and off the Freeway.

In addition, the remaining structure needs to be brought up to current seismic-resistant standards as soon as possible either by retrofit or replacement.

Consequently, the solution selected for the Freeway must satisfactorily address these concerns by fulfilling the following requirements:

1. Reduce traffic on Oak and Fell Streets to pre-earthquake levels;

2. Eliminate the on-off conflict at the end of the freeway; and

3. Provide a safe and timely transition to a roadway built to current seismic design standards.

With the top three objectives as necessary conditions, the preferred alternative should also fulfill the other criteria outlined in Technical Memorandum #9 to as great an extent as possible.

## EVALUATION OF ALTERNATIVES

For convenience in the discussion, the study alternatives are grouped into three categories based on similarities of concept and traffic service:

A. **Retrofit Alternatives**: Alternative #1 (Double-deck) and Alternative #2 (Single-deck "hybrid" retrofit);

B. **New Market Street Crossings**: Alternative #3 (Low single-deck) and Alternative #4 (Deep Tunnel); and

C. **South of Market Alternatives**: Alternative #5 (Street reversal) and Alternative #6 (South Van Ness).

Alternative #7, the Tenth Street Tunnel, is not discussed because, at the request of the Task Force, there has not been sufficient information developed for it.

### A. Retrofit Alternatives

The primary advantages of Alternatives 1 and 2 are that they:

1. May be able to keep Freeway traffic moving during construction (although it is our understanding that an approved method of reconstruction has yet to be developed); and

2. May be able to be implemented without requiring major environmental documentation (although likely community objection may make that difficult to achieve).

Arrayed against these two possible (but not definite) positives are a number of negatives:

1. An unsightly elevated structure will be perpetuated in the freeway corridor;

2. Traffic congestion and increased traffic on Oak and Fell Streets will be perpetuated (although Caltrans is continuing to look at potential solutions to alleviate these problems); and

3. The seismic solution for these alternatives is unlikely to be as effective as a total reconstruction or demolition of the existing viaduct. Because of the difficulty of retrofitting the current elevated structure while maintaining traffic and the likelihood that the resulting viaduct will not be as seismic-resistant as a totally new structure.

For these reasons, we believe that the retrofit alternatives should not be considered as a permanent solution to the Central Freeway Corridor.

## B. Market Street Crossing Alternatives

Both of these alternatives call for demolition of the existing concrete structure with a new grade-separated viaduct crossing Market Street: Alternative 3, with a single-deck viaduct which then becomes a cut-and-cover structure north of Haight Street, and Alternative 4, which tunnels under MUNI Metro on Market Street. Though quite different in cost and appearance, each has approximately the same traffic consequences.

Both alternatives satisfy the three "necessary" objectives outlined above by providing better connections to the north that would reduce traffic on Oak/Fell and eliminate the on-off traffic conflict at the Freeway entrance. Both call for total demolition of the existing concrete structure and allow a new structure to be built.

Alternative 4 creates a particularly desirable environment along the current Freeway corridor in terms of visual intrusion, noise and developable land created. However, it carries a price tag considerably higher than the other alternatives and would require additional subsurface engineering investigations to ensure a structure that would not compromise the integrity of the MUNI tunnel. Our investigations so far have indicated the difficulty in finding funding for the project, so it appears unlikely that an alternative considerably more expensive than the others would be favorably received by MTC, Caltrans or FHWA.

Alternative 3 would improve traffic flow through the Freeway corridor while reducing traffic on most existing arterial streets. It has the potential to significantly improve the environment of the freeway corridor by bringing the freeway below ground level for most of the route north of Market. This advantage would be further enhanced by decking over the Freeway between Haight and Page Streets.

As currently constituted, Alternative 3 has two major disadvantages:

- Because traffic from the west enters the freeway at Oak and Octavia Streets and traffic going north exits at Oak and Octavia Streets, there are significant increases in traffic on Oak Street between Laguna and Franklin Streets.

- It has a major impact during construction. Because of subsurface construction, it will require extensive excavation, shoring and closing of streets crossing the freeway.

## C. South of Market Alternatives

Alternatives 5 and 6 both cross Market Street at-grade and continue at-grade along a widened Octavia Street. Alternative 5 proposes to serve those vehicles currently crossing Market Street on the Freeway by maximizing capacity along arterials south of Market and diverting as much traffic to those crossings as possible. Alternative 6 serves current Central Freeway traffic by creating two new at-grade crossings of Market Street: at Octavia Street for traffic going west and at Franklin Street for traffic going north.

Both alternatives would reduce traffic along Oak and Fell streets and help direct northbound traffic towards Franklin and Gough Streets. They both would improve the immediate environment of the freeway corridor by bringing the elevated structure to grade so they satisfy the "necessary" criteria.

Alternative 5 does a good job of spreading out northbound traffic in the south of Market area. Because of this, less traffic than might be expected is drawn to the Octavia crossing of Market Street and there is enough capacity on the Freeway to keep it from backing onto the James Lick Freeway under normal circumstances. However, it does bring much more traffic through the Civic Center and Tenderloin areas. In addition, traffic is increased on Octavia, Laguna and cross streets in the area that would previously have taken the Freeway. Handling the increased traffic south of Market will probably require peak hour parking prohibition along Tenth and possibly Eighth Streets.

Alternative 6 concentrates more of the traffic directly onto the Franklin crossing of Market Street. This concentration, and inadequate capacity of the Franklin/Market intersection causes some backups onto or near the James Lick Freeway. In addition, the amount of new structure for Alternative 6 makes the plan expensive and has the potential for adverse environmental impacts along South Van Ness Avenue. Businesses along South Van Ness will be adversely impacted both during construction and after completion of the ramps. This might significantly increase costs or hold up the project because of opposition of abutting owners and tenants who, unlike those persons living along the current Freeway corridor, would derive no real benefits from this plan.

Both alternatives require purchase of land outside the right-of-way; a process that could delay implementation. In addition, by requiring reconstruction of the steel structure, use of the Mission Street ramps during construction would not be possible.

In general, both Alternatives 5 and 6 are probably more complex and costly than they need to be, considering the benefits that accrue from the major structural work involved. A simpler alternative that improves traffic flow along south of Market streets combined with a ramp that goes to grade at Market and Octavia Streets would produce (and not require reconstruction of the steel section of the Freeway) a far less costly solution with minimal construction impacts.

## RECOMMENDATIONS

Given the foregoing, it is recommended that Alternative 3, the low single deck alternative, be selected to go forward as the preferred alternative. There are a number of compelling reasons for this:

1. The alternative provides similar traffic functions that the Freeway did prior to Loma Prieta but is much more environmentally sensitive than the current and prior elevated structure.

2. Traffic increases on City streets would be minimal and confined to the corridor of the current Freeway.

3. Construction and construction impacts would be confined to the current Freeway corridor.

4. The primarily below-ground roadway will present a major improvement to the immediate environment of the Freeway corridor north of Market Street.

5. A grade-separated crossing of Market Street is maintained; reducing traffic on streets intersecting Market and not interfering with MUNI service on Market and Mission streets.

6. By requiring total reconstruction of the concrete section of the Freeway, a safer seismic structure can be created without involving the risks of rebuilding or retrofitting while maintaining traffic.

7. We believe this is an alternative that Caltrans, the Citizen's Advisory Task Force and the City can support, thereby speeding implementation and increasing the potential for full funding.

This does not imply that Alternative 3 is perfect. It has a number of defects which need to be mitigated as part of the environmental, design and construction process:

1. The open cut created by the freeway should be covered over between Haight and Page streets to create more land, reduce noise and improve visual and pedestrian access across the Octavia Street corridor.

2. Particular care needs to be devoted to design of the low deck as it crosses Market Street in terms of lighting and visual impact so that a good pedestrian corridor along Market Street can be created and the current unsightly environment under the Freeway eliminated.

3. The traffic simulation model indicates that improved traffic flow on the Central Freeway in Alternative 3 draws more traffic to the Freeway. While beneficial in reducing traffic along a congested section of Mission Street (from where most of the excess is drawn) it brings more traffic into the Hayes Valley (and particularly Oak Street) than needs to be there. Some of the changes proposed in South of Market Alternatives 5 and 6 need to be adopted as part of Alternative 3 to improve flow for traffic going from the James Lick Freeway to destinations that do not need to be served by the Central Freeway. We believe that the changes can be implemented without reversing street directions, although street reversals should be an option. Signing, and traffic improvements along alternative routes (see Technical Memorandum #7) are needed to divert some of the traffic to other routes. These should be implemented prior to construction and the most effective should remain when the Freeway is completed.

4. Traffic along Oak Street between Laguna and Franklin needs to be reduced and controlled through roadway design, signalling and pedestrian walkways, to allow pedestrian and driveway movements to the maximum extent possible.

5. Impacts during construction have to be mitigated as much as possible for this alternative. This will require noise, dust and other environmental safeguards as well as an expedited construction schedule.

6. Noise impacts will need to be mitigated at certain locations.

These mitigations should be refined through continued active Task Force review and communications with affected parties.

# TECHNICAL MEMORANDUM #11

## Assessment of Noise Impact

# Central Freeway

# AREAWIDE TRAFFIC STUDY

prepared for

SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

**DEPARTMENT OF PARKING & TRAFFIC**
**CITY AND COUNTY OF SAN FRANCISCO**

WSA

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August 1995

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# ASSESSMENT OF NOISE IMPACT

# FOR

# CENTRAL FREEWAY AREAWIDE TRAFFIC STUDY

23 AUGUST 1995

Prepared for:

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## SUMMARY

A noise study was performed to determine general levels of noise impact for several proposed Alternatives for the Central Freeway Areawide Traffic Study. The Caltrans computer noise prediction program, SOUND32, was utilized to predict the noise levels from the freeway structure and from city streets. Noise measurements were performed in July 1995 to gain some understanding of the existing noise environment, including assessment of the contributions of the local traffic and reflections from the existing double deck freeway structure.

The existing noise environment along the freeway and along major city arterials already exceeds the Caltrans noise abatement criterion of 67 dBA.

The following alternatives were analyzed in this study:

- Alternative 1: Seismic retrofit of the existing double deck freeway structure;
- Alternative 2: High single deck hybrid concept;
- Alternative 3: Low single deck freeway crossing of Market Street, with a depressed segment between Haight and Page Streets;
- Alternative 3A: Same as Alternative 3 with deck over the depressed segment between Haight and Page Streets;
- Alternative 4: Deep tunnel under Muni Metro terminating at Fell Street;
- Alternative 5: Dispersal of freeway traffic involving street reversals and segregation of Central Freeway off-ramp traffic approaching from the I-80 and US-101 freeways;
- Alternative 6: Termination of the Central Freeway south of Market Street with direct ramps orientated toward Gough/Franklin and Van Ness Corridors.

Of these alternatives, Alternatives 2 and 4 will generate the fewest number of noise impacts, and they will lower the noise levels at several receptors along the corridor. Alternative 1 will generate a moderate increase in noise due to general increase in traffic. With mitigation, Alternatives 3 and 3A will lower the noise level at several receptors along the corridor.

Alternative 5 will increase the noise level at many receptors along the corridor while reducing the noise levels at others, due to the re-distribution of traffic volumes. Alternative 6 will result in noticeable increase in noise along Franklin and Octavia Streets, due to re-distribution of traffic volumes.

The noise study was coordinated with Caltrans to achieve general agreement on methodology and parameters.

Since the study was designed to analyze only relative noise impacts for several proposed Alternatives, further detailed analysis should be performed to determine final mitigation measures during the design phase.

## FEDERAL AND STATE GUIDELINES

Federal Highway Administration (FHWA) design noise levels for various land use ratings (called activity categories) are given in Table 1. These are the same noise abatement criteria used by Caltrans. Noise criteria are assigned to both exterior and interior activities. Noise attenuation provided by most residential structures will probably lead to compliance with the interior design noise level if the exterior criterion is attained (FHWA 1982).

Title 23 of the Code of Federal Regulation Part 772 (23 CFR 772), stipulates procedures and criteria for noise assessment studies. It requires that noise abatement measures be considered on all major transportation projects if the project will cause a substantial increase in existing noise levels, or if projected noise levels "approach or exceed" the noise abatement criteria level for activities occurring on adjacent lands. A "substantial increase" is defined by Caltrans to be at least 12 dBA.

Commercial areas, including offices, are not normally noise-sensitive because there is usually no frequent outdoor use and many indoor activities for this type of land use generate noise as a

natural course of commerce. No commercial or office building in the study area was determined to have frequent outdoor use and consequently would not be noise sensitive.

Caltrans' Highway Design Manual, Chapter 1100, establishes guidelines for construction of noise barriers along freeways. It specifies parameters such as barrier dimensions, acceptable locations, type of barriers, and standard aesthetic treatments. Under FHWA and/or Caltrans' policies, noise barriers will be recommended for transportation improvement projects if the following criteria are met:

1. The proposed project would make significant changes to the roadway in either horizontal or vertical alignment or would increase the number of through-traffic lanes.

2. Predicted worst-case hourly traffic noise is expected to "approach or exceed" FHWA and Caltrans noise abatement criteria for the designated Activity Category.

3. Noise barriers should provide, in most cases, a minimum noise reduction of 5 dBA, and should intercept the line-of-sight from an 11.5 ft high exhaust stack of a truck to the receptor, if applicable.

4. Barriers must be cost-effective and should take into consideration the number of residences to be mitigated and the benefit provided by the barriers.

5. The views of the impacted residents should be taken into consideration in reaching a decision on the reasonableness of abatement measures to be provided.

## MEASUREMENTS AND EXISTING CONDITIONS

A survey of the existing noise environment was performed from July 5-12, 1995 at five locations, and from July 18-21, 1995 at a sixth location. A brief description of each receptor is included in Table 2. The noise monitors were mounted on utility poles or trees at a height of 11 to

15 feet above the ground for security. Figure 1 shows the Project Area and placement of the noise survey measurement locations.

Digitally logging sound level meters were used to obtain 24-hr data over 3 to 7 days. Figures 2 through 7 illustrate the measured hourly equivalent noise levels ($L_{eq}$) at each location. The average pm peak hour noise level is indicated on each Figure. As in the WSA traffic study of existing conditions (Technical Memorandum #4), the pm peak hour was obtained from measured noise levels between 3 to 6 pm, Tuesday through Thursday, with local traffic anomalies ignored. Review of Figures 2 through 7 confirms that the noise environment from both local street traffic and the freeway is fairly consistent during the week. The am peak hour is actually more consistent, and in some cases slightly higher (see Figures 2, 3 and 5). In addition, there appears to be some regular activity, perhaps non-traffic related in the afternoons at several of the locations (i.e., delivery routes or construction activities) which will not be included in the noise model.

Based on visual observations and short-term spot checks, the effect of reflections off the top deck and of local traffic during the peak hour to the noise environment were assessed: +3 dBA for reflections, and, in most cases, +1 to +3 dBA for local traffic. See Table 3 for a summary of the incremental factors used for the noise model.

## FUTURE CONDITIONS

For the future conditions, there may be sufficient change in street traffic volumes to generate a change in the noise level. The specific local traffic parameters are summarized in Table 4. Freeway traffic parameters are summarized in Table 4A. Consistent with Caltrans procedures, design volumes were used for future noise calculations from the Central Freeway. Rather than assume the same volume of traffic for each Alternative, since there are significant differences in traffic flow for each, we have apportioned the traffic volumes in a manner generally consistent with the traffic study prepared by WSA. The assumptions are indicated in Table 4A.

## NOISE MODELS

We have used the Caltrans SOUND32 traffic noise program for prediction of noise levels for all Alternatives. A simple model of the existing noise levels along selected city streets has been used for Alternatives 1, 2, 3, 5 and 6. The traffic parameters for this model were summarized in Table 4. The calculations for this model assumed a flat roadway, and a receptor height 5 ft above ground. All lanes were modelled with one lane, placed at 50 ft from the receptor.

A model of the freeway, with additive factors for reflections off of the freeway structure and for local traffic noise has been used for Alternatives 1, 2, 3 and 5 from Mission Street to the Fell/Oak ramps. This noise model also lumps all traffic into the outer lane of each roadway. The edge of the roadway or retained cut structure has been implemented as a barrier, and k-rails have also been modelled at 2.3 ft height for all elevated structures.

Table 5 summarizes the effect of future local traffic volumes as compared to the existing local traffic volumes at modelled receptors for Alternatives 1, 2, 3 and 5.

## PREDICTED NOISE LEVELS

For predictions of noise levels away from the freeway structure, or where the freeway will no longer exist, Table 6 summarizes the change in noise levels along selected city streets. Note that these noise levels assume free flowing traffic. Noise levels at intersections will be 1 to 2 dBA higher due to stop-and-go traffic near the intersections. The steep grades on Oak, Fell and Octavia Streets will also tend to increase the noise levels along those streets.

We have calculated noise levels at eleven receptors along the freeway corridor. For general verification of the noise model and assumptions regarding reflections and local traffic contributions, the existing condition was also modelled. Table 3 compares the measured data and the modelled noise levels. At all but three locations where measurements are available, there is agreement within +/- 3 dB between the measurements and the noise model. The discrepancies

at Receptors 3, 7 and 8 appear to be due to the limitations of the model at this level of analysis and of the SOUND32 program in predicting noise levels from elevated structures at receptors close to an elevated structure. Also, the SOUND32 program is not designed to deal with analysis of a double deck freeway which results in increased sound level at the lower deck due to reverberant sound between two decks and changes in the actual location of the noise source at the lower deck (i.e., resulting in a new virtual noise source at a considerable height above the floor of the lower deck). Change in the location and height of the noise source is expected to effect the shielding provided by the k-rail and/or barriers at the edge of the lower deck. Further noise analyses at the environmental stage will require careful study of the geometry to ensure good agreement.

Table 7 presents a summary of the modelled noise levels for Alternatives 1, 2, 3 and 5 at receptor heights 5 ft above the ground and 5 ft above the highest residential floor level. Two numbers are presented for each Alternative: 1) the predicted overall noise level, including reflections and traffic as indicated in Tables 3 and 4, and 4A; and 2) the relative change from the modelled existing condition.

Per Caltrans policy, noise levels exceeding 65.5 dBA (rounded up to 66 dBA), and therefore approaching the 67 dBA criterion, will require a noise study to assess the cost effectiveness of mitigation options. Many of the Receptors already meet or exceed 66 dBA.

## MITIGATION

Simple sound barrier wall configurations have been incorporated to indicate an overall level of mitigation required for each alternative. All elevated structures already have the 2.3 ft height k-rail included in the model. The minimum barrier height on elevated structures is 6 ft, and the maximum height is 12 ft. At the edge of retaining wall, the maximum barrier height of 12 ft on top of the retaining wall has been used in our evaluation. Table 8 summarizes the mitigated noise levels at each receptor for two barrier configurations for each Alternative, and the relative level compared *to the unmitigated condition.* Per Caltrans' guidelines and policy, mitigation is

effective if noise levels are reduced below the 67 dBA criterion and a minimum of 5 dBA reduction is obtained (as compared to the unmitigated case).

## DISCUSSION

Table 9 summarizes the noise related effects of changing traffic speed or volume for several different cases. These corrections may be applied to the predicted noise levels in this report to gain an understanding of how different scenarios may effect the predicted noise levels.

Alternative 1 (seismic retrofit of the existing double deck structure) will increase the noise levels at all receptor locations, and all but one of the receptor locations will approach or exceed 67 dBA at some residential floor level (see Table 7). The exception is Receptor 5, where the lower ground elevation provides additional shielding. At the street level, there will be little change in noise levels, except along Octavia, where the traffic volume is projected to decrease significantly (see Table 6). A 6 ft barrier along the elevated structure will achieve noise levels below the criterion for all receptors except Receptor 10 (see Table 8). A 5 dBA reduction is also obtained at most receptor locations. Increasing the barrier height to 9 ft will further reduce the noise levels to receptors along the structure, however Receptor 10 will receive minimal improvement (see Table 8).

Alternative 2 (high single-deck hybrid concept) will lower the noise levels compared to the existing due to the increased distance from receptors, the increased shielding provided by the edge of the roadway, and reduction/elimination of reflection effects. Noise levels at Receptors 4 through 7 and Receptor 10 will experience noise levels approaching or exceeding the 67 dBA criterion (see Table 7). At the street level, the same levels of change are expected for the City street traffic for Alternative 2 as for Alternative 1 (see Table 6). Due to the already high elevation of this Alternative, the effect of 9 ft and 12 ft height sound barriers will improve the noise environment somewhat, but it will have a minimal effect to those receptors which will require mitigation most. There will still be noise impact to Receptors 7 and 10 (see Table 7).

Alternative 3 (low single-deck freeway depressed north of Market Street) will increase noise levels compared to the existing. Despite the shielding provided by the edge of the retained cut, the roadway will be closer to the receptors. Noise levels will approach or exceed 67 dBA at all Receptors (see Table 7). At the street level, a marked increase in noise will occur on Oak street between Laguna and Octavia, as vehicles access the freeway from Oak and not Laguna. Otherwise, there will be minimal change at other locations (see Table 6). Application of a sound barrier wall 9 ft above the elevated structure and at 9 ft above the retained cut section will reduce the noise impacts at several receptors. Noise levels at Receptors 1, 4, 7 and 8 will still exceed 67 dBA. Increasing the barrier height to 12 ft will result in exceedances at only Receptors 4, 7 and 8. It is possible that an increased barrier height (to 14 or 16 ft above grade) along the retained cut section will eliminate these remaining impacts. (This needs to be investigated during the design phase of the project.)

Alternative 3A (design option with covered block from Haight to Page) will generate lower noise levels to Receptors 4 through 7 than for Alternative 3, however, only Receptor 6 will not experience noise levels approaching or exceeding 67 dBA. At the street level, the same level of change is expected for the City street traffic for Alternative 3A as for Alternative 3. Mitigation will have a similar effect for Alternative 3A as for Alternative 3, however the noise levels at Receptors 4, 7 and 8 will be even lower. Noise impacts will still be experienced at these homes with a 12 ft barrier (see Table 8).

Alternative 4 (deep tunnel under Muni Metro) has not been modelled. Qualitatively speaking, there will be no noise impacts to Receptors 4 through 7, and perhaps minimal impacts at Receptors 8 and 9 with this Alternative due to the tunnel. We expect that noise levels will be the same as for Alternative 3 for the remaining receptors. At the street level, the same level of change is expected for the City street traffic for Alternative 4 as for Alternative 3.

Alternative 5 (freeway traffic access dispersal) will result in noise impacts to all Receptors except Receptors 8 and 10. With the removal of the freeway north of Market, the street level traffic at Octavia will increase dramatically. The volume of traffic on Oak Street will still be significant,

but not sufficient to keep noise levels above 65.5 dBA. At the street level, a marked increase in noise will occur on Octavia Street, as cars now access the freeway at Market street. There will also be noise increases along Fell and 10th Streets (see Table 6). A 6 ft barrier along the elevated structure and the embankment to Market Street will lower the noise levels at Receptors 1-3 and 11. However, a minimum 5 dBA reduction is not achievable with a 6 ft barrier, and only just barely with a 9 ft barrier. Noise levels at Receptor 3 will still be in excess of the 67 dBA criterion (see Table 8). The noise impacts to the homes along the west side of Octavia cannot be reduced with a sound barrier wall, due to access and safety requirements. However, it may be possible to construct a barrier to provide some noise reduction to some residences east of Octavia.

For Alternative 6 (termination of the freeway south of Market Street with direct ramps toward Gough/Franklin and Van Ness corridors), only a street level noise analysis was performed. Notable increases in noise will occur on Franklin and Octavia Streets (see Table 6).

At the maximum traffic capacity for the City streets, noise levels are expected to increase along many of the streets compared with the existing conditions (see Table 6).

It is important to note that the analysis is only a comparative type of analysis for each alternative and absolute design should be done at a later date. If detailed design phase of the study shows that refections from the upper deck are significant, an acoustical absorptive treatment can be used at the bottom of the upper deck area to minimize reflection effects.

# APPENDIX A
# GLOSSARY OF ACOUSTICAL TERMS

**A-Weighted Sound Level (dBA):** The sound pressure level in decibels as measured on a sound level meter using the internationally standardized A-weighting filter or as computed from sound spectral data to which A-weighting adjustments have been made. A-weighting de-emphasizes the low and very high frequency components of the sound in a manner similar to the response of the average human ear. A-weighted sound levels correlate well with subjective reactions of people to noise and are universally used for community noise evaluations.

**Ambient Noise Level:** The prevailing general noise existing at a location or in a space, which usually consists of a composite of sounds from many sources near and far.

**Decibel (dB):** The decibel is a measure on a logarithmic scale of the magnitude of a particular quantity (such as sound pressure, sound power, sound intensity) with respect to a standardized reference quantity.

**Energy Equivalent Level ($L_{eq}$):** The level of a steady noise which would have the same energy as the fluctuating noise level integrated over the time period of interest. $L_{eq}$ is widely used as a single-number descriptor of environmental noise. $L_{eq}$ is computed by summing the noise energy over the stated time period using mathematical integration.

**Frequency (Hz):** The number of oscillations per second of a periodic noise expressed in Hertz (abbreviated Hz). Frequency in Hertz is the same as cycles per second.

**Receptor:** A term used for a location potentially affected by noise. Receptors refer to both modeling locations and monitoring locations, and are chosen because of their sensitivity to noise and/or their representative location.

**Reverberant Field:** The region in a room where the reflected sound dominates, as opposed to the region close to the noise source, where the direct sound dominates.

**Reverberation:** The continuation of sound reflections within an enclosed space after the sound source has stopped.

**Sound Pressure Level (SPL):** The sound pressure level of a sound in decibels is 20 times the logarithm to the base of 10 of the ratio of the RMS value of the sound pressure to the RMS value of a reference sound pressure. The standard reference sound pressure is 20 micro-pascals as indicated in ANSI S1.8-1989, "Reference Quantities for Acoustical Levels".

TABLE 1 FHWA NOISE ABATEMENT CRITERIA*

| Activity Category | $L_{eq}(h)$** -dBA- | $L_{10}(h)$ -dBA- | Description of Activity Category |
|---|---|---|---|
| A | 57 (Exterior) | 60 (Exterior) | Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential to serve its intended purpose. |
| B | 67 (Exterior) | 70 (Exterior) | Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries and hospitals. |
| C | 72 (Exterior) | 75 (Exterior) | Developed lands, properties, or activities not included in Categories A or B above. |
| D | --- | --- | Undeveloped lands. |
| E | 52 (Interior) | 55 (Interior) | Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums. |

Source: Federal Highway Administration 1982.

* Either $L_{10}(h)$ or $L_{eq}(h)$ (but not both) may be used on a project.

** Hourly A-weighted Sound Level for the noisiest hour of the day in the design year.

TABLE 2 SUMMARY OF RECEPTOR LOCATIONS FOR CENTRAL FREEWAY ANALYSIS

| Receptor ID | Description | Comment |
|---|---|---|
| 1 | 1365 Stevenson, north of freeway | Residential, 2 floors, measurement location |
| 2 | 16 Valencia @ McCoppin | Residential upper floors (2-4), modelled receptor only |
| 3 | 133 McCoppin @ Elgin Park | Residential, 1 1/2 floors, measurement location |
| 4 | 59 Octavia @ Haight | Residential, 3 floors, measurement location |
| 5 | Haight, east of freeway | Residential, 3 floors, modelled receptor only |
| 6 | 159 Octavia @ Page | Residential, 2 floors, modelled receptor only |
| 7 | 165 Page, east of freeway | Residential, 3 floors, measurement location |
| 8 | 275-277 Oak, east of freeway | Residential, 2 floors, measurement location |
| 9 | 200 Lily, west of freeway | Residential, 3 floors, modelled receptor only |
| 10 | 307 Oak, west of freeway | Residential, 3 floors, measurement location |
| 11 | 27-31 Duboce at Woodward | Residential, 3 floors, modelled receptor only |

TABLE 3 SUMMARY OF MEASURED AND MODELLED PM PEAK HOUR NOISE LEVELS[1] FOR CENTRAL FREEWAY STUDY - EXISTING CONDITIONS

| Receptor ID | Description | Average Measured[2] (dBA) | Modelled | | | |
|---|---|---|---|---|---|---|
| | | | Total (dBA) | Incremental Contributions (dBA) | | Direct (dBA) |
| | | | | Reflection | Street Traffic | |
| 1[M] | 1365 Stevenson | 71 | 69 | 3 | 3 | 63 |
| 2[3] | 16 Valencia | - | 64 | 3 | 3 | 57 |
| 3[M] | 133 McCoppin | 76 | 65 | 3 | 5 | 67 |
| 4[M] | 59 Octavia | 71 | 68 | 3 | 3 | 62 |
| 5[3] | Haight, east of freeway | - | 61 | 3 | 3 | 55 |
| 6[3] | 159 Octavia | - | 66 | 3 | 3 | 60 |
| 7[M] | 165 Page | 70 | 62 | 3 | 3 | 56 |
| 8[M] | 275-277 Oak | 70 | 64 | 3 | 3 | 58 |
| 9[3] | 299 Lily | - | 64 | 3 | 1 | 60 |
| 10[M] | 307 Oak | 71 | 71 | 1 | 3 | 67 |
| 11[3] | 27-31 Duboce | - | 64 | 3 | 4 | 57 |

M: measurement and model location, 11 to 15 ft above ground
1 : pm peak hour $L_{eq}$ dBA
2 : Average 3-6pm, Tuesday through Thursday
3 : modelled at 5 ft above ground

TABLE 4 LOCAL TRAFFIC VOLUME AND SPEED PARAMETERS

| Location | Speed (mph) | Total Volume (vph) | | | | | | % cars | % med. trucks | % heavy trucks |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Existing | Alt 1[1] | Alt 3[2] | Alt 5 | Alt 6 | Capacity | | | |
| Octavia at Market | 25 | 681 | 94 | 359 | 2771 | 2502 | 1200/3000[3] | 92 | 5 | 3 |
| Laguna at Market | 25 | 863 | 540 | 644 | 933 | 865 | 1200 | 92 | 5 | 3 |
| Fell past Octavia | 25 | 1438 | 1446 | 919 | 2623 | 2313 | 3000 | 95 | 4 | 1 |
| Oak past Laguna | 25 | 970 | 888 | 2271 | 1649 | 1376 | 3000 | 95 | 4 | 1 |
| Duboce west of Mission | 25 | 2360 | 1826 | 1742 | 1759 | 1559 | 2400 | 92 | 5 | 3 |
| Mission at 11th | 25 | 1533 | 1284 | 1019 | 846 | 1339 | 2400 | 92 | 5 | 3 |
| 10th north of Mission | 25 | 1886 | 1998 | 2099 | 3920 | 2331 | 3600 | 92 | 5 | 3 |
| 9th north of Mission | 25 | 3597 | 3373 | 3526 | 3046 | 3509 | 3600 | 92 | 5 | 3 |
| 8th north of Mission | 25 | 1970 | 1762 | 1634 | 2061 | 1550 | 3600 | 92 | 5 | 3 |
| 7th north of Mission | 25 | 1621 | 1816 | 1850 | 904 | 1824 | 2400 | 92 | 5 | 3 |
| Gough north of Market | 25 | 1791 | 1721 | 1663 | 2336 | 2335 | 2400 | 95 | 4 | 1 |
| Franklin north of Market | 25 | 1091 | 1014 | 803 | 723 | 2604 | 2400 | 95 | 4 | 1 |
| Van Ness north of Market | 25 | 3585 | 3478 | 2861 | 3706 | 3690 | 3600 | 92 | 4 | 4 |
| South Van Ness south of 13th | 25 | 1788 | 2067 | 1999 | 2005 | 2160 | 2400 | 92 | 3 | 4 |

1: Assume same for Alternative 2
2: Assume same for Alternatives 3A and 4
3: 3000 capacity for Alternative 5 and 6

TABLE 4A DESIGN TRAFFIC VOLUMES AND SPEED PARAMETERS USED FOR THE CENTRAL FREEWAY

| Location | Speed (mph) | Total Volume (vph) | | | | | % cars | % med. trucks | % heavy trucks |
|---|---|---|---|---|---|---|---|---|---|
| | | Existing | Alt 1 | Alt 2 | Alt 3 | Alt 5 | | | |
| NB Central Fwy from WB I-80 and NB 101 | 40 | 4200 | 4500 | 4500 | 4500 | 3000 | 98 | 2 | 0 |
| NB 101 to South Van Ness | 40 | - | - | - | - | 1500 | 98 | 2 | 0 |
| NB Central Freeway to Mission | 40 | 1400 | 1500 | 1500 | 1000 | 1000 | 98 | 2 | 0 |
| NB Central Fwy to Fell | 40 | 2800 | 3000 | 3000 | 2000 | - | 98 | 2 | 0 |
| NB Central Freeway to Oak | 40 | - | - | - | 1500 | - | 98 | 2 | 0 |
| NB Central Freeway to Market | 40 | - | - | - | - | 1500 | 98 | 2 | 0 |
| NB Central Freeway to Duboce | 40 | - | - | - | - | 500 | 98 | 2 | 0 |
| SB Central Fwy to EB I-80 and SB 101 | 40 | 3900 | 4500 | 4500 | 4500 | 4500 | 98 | 2 | 0 |
| SB Central Freeway from South Van Ness | 40 | 1300 | - | - | - | - | - | 2 | 2 |
| SB Central Fwy from Laguna | 40 | 2800 | 4500 | 4500 | 4500 | - | 98 | 2 | 0 |
| SB Freeway from Market | 40 | - | - | - | - | 3000 | 98 | 2 | 0 |
| SB Freeway from Otis | 40 | - | - | - | - | 1500 | 98 | 2 | 0 |

TABLE 5 SUMMARY OF MODELLED NOISE LEVEL CONTRIBUTIONS FROM LOCAL TRAFFIC FOR CENTRAL FREEWAY STUDY AT SPECIFIC LOCATIONS

| Receptor ID | Description | Existing | Increment of Predicted Local Future Traffic over Existing | | | | |
|---|---|---|---|---|---|---|---|
| | | Modelled | Alt 1 | Alt 2 | Alt 3 | Alt 3A | Alt 5 |
| 1 | 1365 Stevenson | 3 | 0 | 0 | 0 | 0 | 0 |
| 2 | 16 Valencia | 3 | 0 | 0 | 0 | 0 | 0 |
| 3 | 133 McCoppin | 5 | 0 | 0 | 0 | 0 | 2 |
| 4 | 59 Octavia | 3 | 0 | 0 | ● | 0 | 6 |
| 5 | Haight east of fwy | 3 | 0 | 0 | 0 | 0 | 3 |
| 6 | 159 Octavia | 3 | 0 | 0 | 0 | 0 | 6 |
| 7 | 165 Page | 3 | 0 | 0 | 0 | 0 | 3 |
| 8 | 275-277 Oak | 3 | 0 | 0 | 0 | 0 | 3 |
| 9 | 200 Lily | 1 | 0 | 0 | 0 | 0 | 6 |
| 10 | 307 Oak | 3 | 0 | 0 | 2 | 2 | 2 |
| 11 | 27-31 Duboce | 3 | 0 | 0 | 0 | 0 | 0 |

TABLE 6 PREDICTED CHANGES IN PM PEAK HOUR NOISE LEVELS ALONG CITY STREETS AT 50 FT FROM NEAR TRAFFIC LANE, IN THE MIDDLE OF THE BLOCK

| Street | Predicted Existing[4] (dBA) | Noise Increment due to change in traffic volume | | | | |
|---|---|---|---|---|---|---|
| | | Alt 1[1] | Alt 3[2] | Alt 5 | Alt 6 | Capacity |
| Octavia at Market[3] | 63 | -9 | -3 | 6 | 6 | 6 |
| Laguna at Market | 69 | -2 | -1 | 0 | 0 | 1 |
| Fell past Octavia[3] | 64 | 0 | -2 | 3 | 2 | 3 |
| Oak past Laguna[3] | 62 | 0 | 4 | 2 | 2 | 5 |
| Duboce west of Mission | 69 | -1 | -1 | -1 | -2 | 0 |
| Mission at 11th | 67 | -1 | -2 | -3 | -1 | 2 |
| 10th north of Mission | 68 | 0 | 0 | 3 | 1 | 3 |
| 9th north of Mission | 71 | 0 | 0 | -1 | 0 | 0 |
| 8th north of Mission | 68 | 0 | -1 | 0 | -1 | 3 |
| 7th north of Mission | 68 | 0 | 1 | -3 | 1 | 2 |
| Gough north of Market | 65 | 0 | 0 | 1 | 1 | 1 |
| Franklin north of Market | 63 | 0 | -1 | -2 | 4 | 3 |
| Van Ness north of Market | 71 | 0 | -1 | 0 | 0 | 0 |
| South Van Ness south of 13th | 68 | 1 | 0 | 0 | 1 | 1 |

1: Assume same for Alternative 2
2: Assume same for Alternatives 3A and 4
3: Steep grade, noise levels may be higher
4: Noise levels in the middle of the block with free-flowing traffic at 25 mph

TABLE 7 SUMMARY OF MODELLED NOISE LEVELS† FOR CENTRAL FREEWAY STUDY - NO MITIGATION

| Receptor ID | Description | Existing | Future Noise Level and Increment of Predicted Future over Modelled Existing | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Alt 1[1] | | Alt 2[2] | | Alt 3[2] | | Alt 3A[2] | | Alt 5[2] | |
| | | Modelled[1] | | | | | | | | | | |
| 1-1 | 1365 Stevenson, 1st floor | 67 | 68 | 1 | 61 | -6 | 70 | 3 | 70 | 3 | 65 | -2 |
| 1-2 | 1365 Stevenson, 2nd floor | 70 | 71 | 1 | 62 | -8 | 75 | 5 | 75 | 5 | 67 | -3 |
| 2-1 | 16 Valencia, 1st floor | 63 | 64 | 1 | 62 | -1 | 66 | 3 | 66 | 3 | 62 | -1 |
| 2-4 | 16 Valencia, 4th floor | 68 | 69 | 1 | 64 | -4 | 72 | 4 | 72 | 4 | 67 | -1 |
| 3-1 | 133 McCoppin, 1st floor | 63 | 65 | 2 | 62 | -1 | 62 | -1 | 62 | -1 | 82 | 19 |
| 3-2 | 133 McCoppin, 2nd floor | 70 | 70 | 0 | 63 | -7 | 70 | 0 | 70 | 0 | 80 | 10 |
| 4-1 | 59 Octavia, 1st floor | 66 | 68 | 2 | 64 | -2 | 67 | 1 | 65 | -1 | 70 | 4 |
| 4-3 | 59 Octavia, 3rd floor | 70 | 71 | 1 | 68 | -2 | 72 | 2 | 69 | -1 | 70 | 0 |
| 5-1 | Haight east of fwy, 1st floor | 61 | 63 | 2 | 66 | 5 | 66 | 5 | 64 | 3 | 66 | 5 |
| 5-3 | Haight east of fwy, 3rd floor | 64 | 65 | 1 | 66 | 2 | 73 | 9 | 69 | 5 | 66 | 2 |
| 6-1 | 159 Octavia, 1st floor | 66 | 68 | 2 | 65 | -1 | 63 | -3 | 61 | -5 | 69 | 3 |
| 6-2 | 159 Octavia, 2nd floor | 68 | 70 | 2 | 66 | -2 | 69 | 1 | 65 | -3 | 69 | 1 |
| 7-1 | 165 Page, 1st floor | 61 | 63 | 2 | 68 | 7 | 68 | 7 | 64 | 3 | 66 | 5 |
| 7-3 | 165 Page, 3rd floor | 64 | 66 | 2 | 69 | 5 | 73 | 9 | 68 | 4 | 66 | 2 |
| 8-1 | 275-277 Oak, 1st floor | 64 | 65 | 1 | 65 | 1 | 71 | 7 | 71 | 7 | 64 | 0 |
| 8-2 | 275-277 Oak, 2nd floor | 65 | 66 | 1 | 65 | 0 | 73 | 8 | 73 | 8 | 64 | -1 |
| 9-1 | 200 Lily, 1st floor | 63 | 67 | 3 | 64 | 1 | 64 | 1 | 64 | 1 | 69 | 6 |

TABLE 7 (CONTINUED)

| Receptor ID | Description | Existing | Future Noise Level and Increment of Predicted Future over Modelled Existing | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Alt 1[1] | | Alt 2[2] | | Alt 3[2] | | Alt 3A[2] | | Alt 5[2] | |
| | | Modelled[1] | | | | | | | | | | |
| 9-3 | 200 Lily, 3rd floor | 70 | 71 | 1 | 65 | -5 | 70 | 0 | 70 | 0 | 69 | -1 |
| 10-1 | 307 Oak, 1st floor | 69 | 72 | 3 | 70 | 1 | 66 | -3 | 66 | -3 | 65 | -4 |
| 10-3 | 307 Oak, 3rd floor | 72 | 74 | 2 | 73 | 1 | 69 | -3 | 68 | -4 | 65 | -7 |
| 11-1 | 27-31 Duboce, 1st floor | 64 | 65 | 1 | 59 | -5 | 61 | -3 | 61 | -3 | 62 | -2 |
| 11-3 | 27-31 Duboce, 3rd floor | 68 | 69 | 1 | 62 | -6 | 70 | 2 | 70 | 2 | 66 | -2 |

†: pm peak hour $L_{eq}$ dBA
1: includes effect of reflections off of upper deck where applicable and local traffic. See Table 3.
2: includes effect of future local traffic. See Table 4.

TABLE 8 SUMMARY OF MODELLED NOISE LEVELS† FOR CENTRAL FREEWAY STUDY - WITH MITIGATION

| Rec. ID | Description | Future Noise Levels with Mitigation and Increment Below the Unmitigated Case | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alt 1[1] | | | | Alt 2[2] | | | | Alt 3[2] | | | | Alt 3A[2] | | | | Alt 5[2] | | | |
| | | 6 ft | | 9 ft | | 9 ft | | 12 ft | | 9 ft | | 12 ft | | 9 ft | | 12 ft | | 6 ft | | 9 ft | |
| 1-1 | 1365 Stevenson, 1st floor | 61 | -7 | 59 | -9 | 59 | -2 | 59 | -2 | 64 | -6 | 61 | -9 | 64 | -6 | 61 | -9 | 64 | -1 | 64 | -1 |
| 1-2 | 1365 Stevenson, 2nd floor | 64 | -7 | 61 | -10 | 60 | -2 | 59 | -3 | 68 | -7 | 65 | -10 | 68 | -7 | 65 | -10 | 66 | -1 | 66 | -1 |
| 2-1 | 16 Valencia, 1st floor | 58 | -6 | 57 | -7 | 60 | -2 | 30 | -2 | 61 | -5 | 60 | -6 | 61 | -5 | 60 | -6 | 59 | -3 | 58 | -3 |
| 2-4 | 16 Valencia, 4th floor | 62 | -7 | 59 | -10 | 61 | -3 | 61 | -3 | 65 | -7 | 63 | -9 | 65 | -7 | 63 | -9 | 63 | -4 | 62 | -4 |
| 3-1 | 133 McCoppin, 1st floor | 60 | -5 | 60 | -5 | 62 | 0 | 62 | 0 | 60 | -2 | 59 | -3 | 59 | -3 | 59 | -3 | 78 | -4 | 72 | -4 |
| 3-2 | 133 McCoppin, 2nd floor | 64 | -6 | 62 | -8 | 62 | -1 | 62 | -1 | 63 | -7 | 62 | -8 | 63 | -7 | 61 | -9 | 80 | 0 | 80 | 0 |
| 4-1 | 59 Octavia, 1st floor | 62 | -6 | 61 | -7 | 63 | -1 | 63 | -1 | 62 | -5 | 61 | -6 | 63 | -2 | 61 | -4 | - | - | - | - |
| 4-3 | 59 Octavia, 3rd floor | 64 | -7 | 63 | -8 | 64 | -4 | 63 | -5 | 71 | -1 | 71 | -1 | 68 | -1 | 68 | -1 | - | - | - | - |
| 5-1 | Haight east of fwy, 1st floor | 58 | -5 | 58 | -5 | 65 | -1 | 65 | -1 | 61 | -5 | 60 | -6 | 61 | -3 | 59 | -5 | - | - | - | - |
| 5-3 | Haight east of fwy, 3rd floor | 60 | -5 | 59 | -6 | 65 | -1 | 65 | -1 | 66 | -7 | 65 | -8 | 65 | -4 | 64 | -5 | - | - | - | - |
| 6-1 | Octavia @ Page, 1st floor | 64 | -4 | 63 | -5 | 65 | 0 | 64 | - | 59 | -4 | 58 | -5 | 59 | -2 | 57 | -4 | - | - | - | - |
| 6-2 | Octavia @Page, 2nd floor | 64 | -6 | 63 | -7 | 65 | -1 | 65 | -1 | 62 | -7 | 61 | -8 | 62 | -3 | 60 | -5 | - | - | - | - |
| 7-1 | 165 Page, 1st floor | 59 | -4 | 59 | -4 | 68 | 0 | 68 | 0 | 61 | -7 | 60 | -8 | 61 | -3 | 60 | -4 | - | - | - | - |
| 7-3 | 165 Page, 3rd floor | 61 | -5 | 60 | -6 | 69 | 0 | 69 | 0 | 71 | -2 | 69 | -4 | 68 | 0 | 68 | 0 | - | - | - | - |
| 8-1 | 275-277 Oak, 1st floor | 60 | -5 | 60 | -5 | 65 | 0 | 65 | 0 | 64 | -7 | 63 | -8 | 63 | -8 | 62 | -9 | - | - | - | - |
| 8-2 | 275-277 Oak, 2nd floor | 61 | -5 | 60 | -6 | 65 | 0 | 65 | 0 | 71 | -2 | 70 | 3 | 70 | -3 | 70 | -3 | - | - | - | - |

TABLE 8 (CONTINUED)

| Rec. ID | Description | Future Noise Levels with Mitigation and Increment Below the Unmitigated Case | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alt 1[1] | | | | Alt 2[2] | | | | Alt 3[2] | | | | Alt 3A[2] | | | | Alt 5[2] | | | |
| | | 6 ft | | 9 ft | | 9 ft | | 12 ft | | 9 ft | | 12 ft | | 9 ft | | 12 ft | | 6 ft | | 9 ft | |
| | | | | | | | | | | | | | | | | | | | | | |
| 9-1 | 200 Lily, 1st floor | 63 | -4 | 63 | -4 | 64 | 0 | 64 | 0 | 59 | -5 | 58 | -6 | 59 | -5 | 58 | -6 | - | - | - | - |
| 9-3 | 200 Lily, 3rd floor | 65 | -6 | 63 | -6 | 64 | -1 | 64 | -1 | 65 | -5 | 65 | 5 | 65 | -5 | 65 | -5 | - | - | - | - |
| 10-1 | 307 Oak, 1st floor | 69 | -3 | 69 | -3 | 70 | 0 | 69 | -1 | 64 | -2 | 64 | -2 | 64 | -2 | 64 | -2 | - | - | - | - |
| 10-3 | 307 Oak, 3rd floor | 71 | -3 | 70 | -4 | 71 | -2 | 70 | -3 | 65 | -4 | 65 | -4 | 65 | -3 | 65 | -3 | - | - | - | - |
| 11-1 | 27-31 Dubocc, 1st floor | 59 | -6 | 58 | -7 | 58 | -1 | 58 | -1 | 58 | -3 | 58 | -3 | 58 | -3 | 58 | -3 | 60 | -2 | 59 | -3 |
| 11-3 | 27-31 Dubocc, 3rd floor | 62 | -7 | 60 | -9 | 59 | -3 | 59 | -3 | 64 | -6 | 61 | -9 | 64 | -6 | 61 | -9 | 63 | -3 | 61 | -5 |

†: pm peak hour $L_{eq}$ dBA

1: includes effect of reflections off of upper deck where applicable and local traffic. See Table 3.

2: includes effect of future local traffic. See Table 4.

TABLE 9 SUMMARY OF RELATIVE CHANGES TO NOISE LEVELS WITH CHANGES IN INPUT PARAMETERS

| Condition | Relative change (dBA) |
|---|---|
| Increase traffic volume from 1500 vph/lane to 1800 vph/lane | + 1.0 |
| Increase speed from 25 mph to 30 mph | + 1.5 |
| Increase speed from 25 mph to 35 mph | + 2.9 |
| Increase speed from 25 mph to 40 mph | + 2.0 |
| Increase speed from 40 mph to 45 mph | + 0.5 |
| Increase speed from 40 mph to 50 mph | + 1.0 |

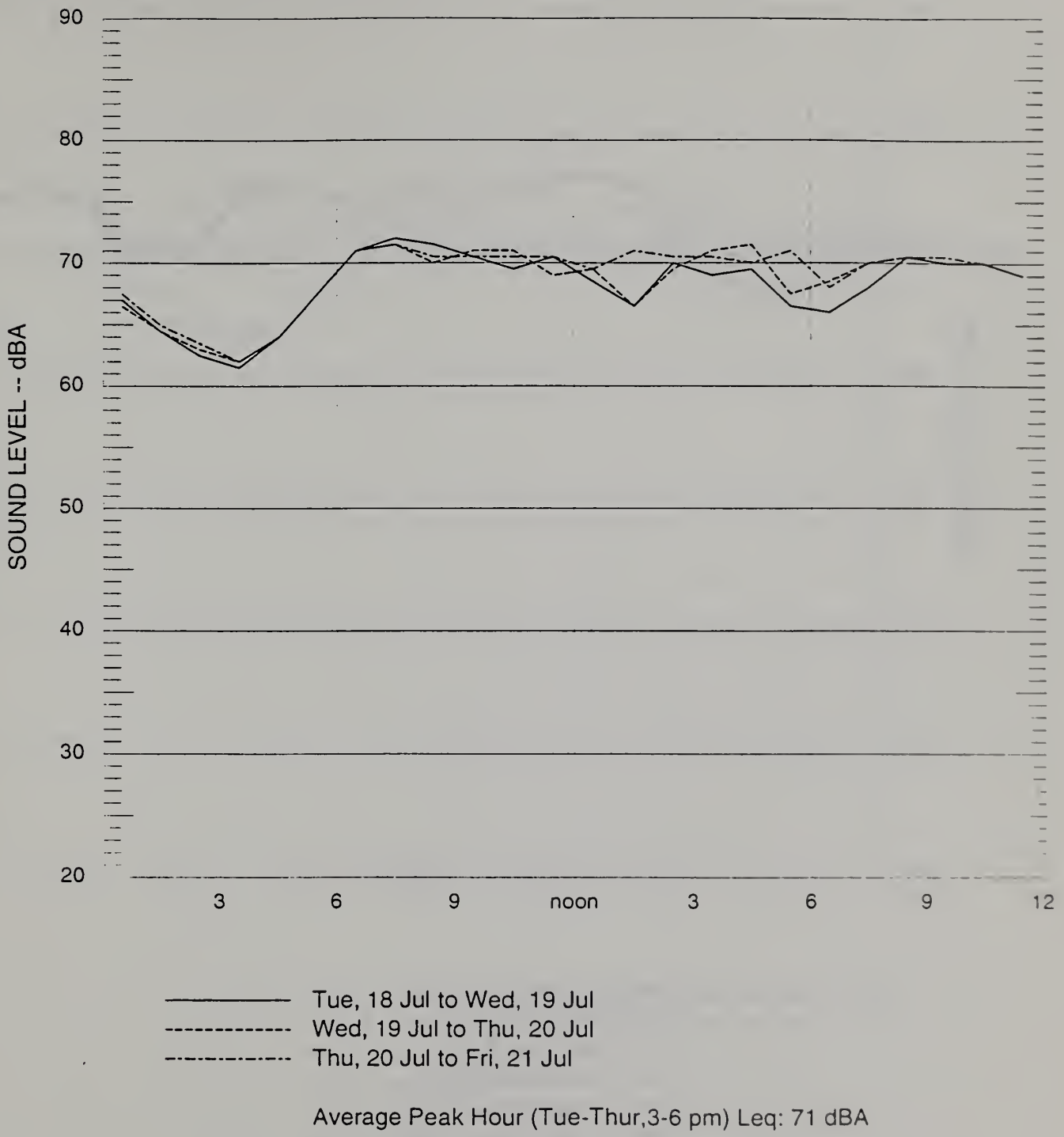



FIGURE 2 LOCATION 1 - 1365 STEVENSON: SUMMARY OF HOURLY EQUIVALENT NOISE LEVELS OVER DURATION OF SURVEY
18 TO 21 JULY, 1995

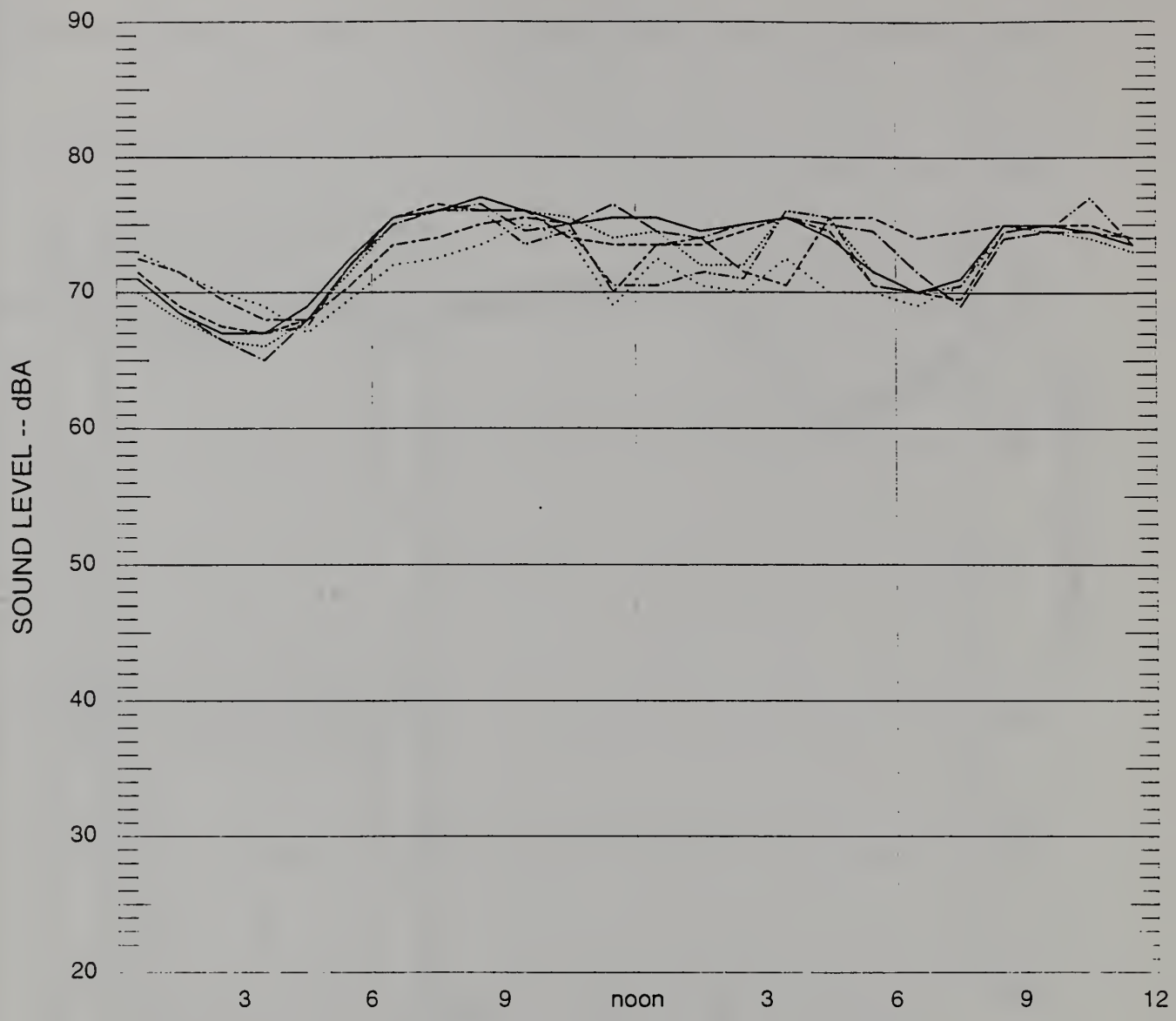



FIGURE 3 LOCATION 3 - 133 McCOPPIN: SUMMARY OF HOURLY EQUIVALENT NOISE LEVELS OVER DURATION OF SURVEY 5 TO 12 JULY, 1995

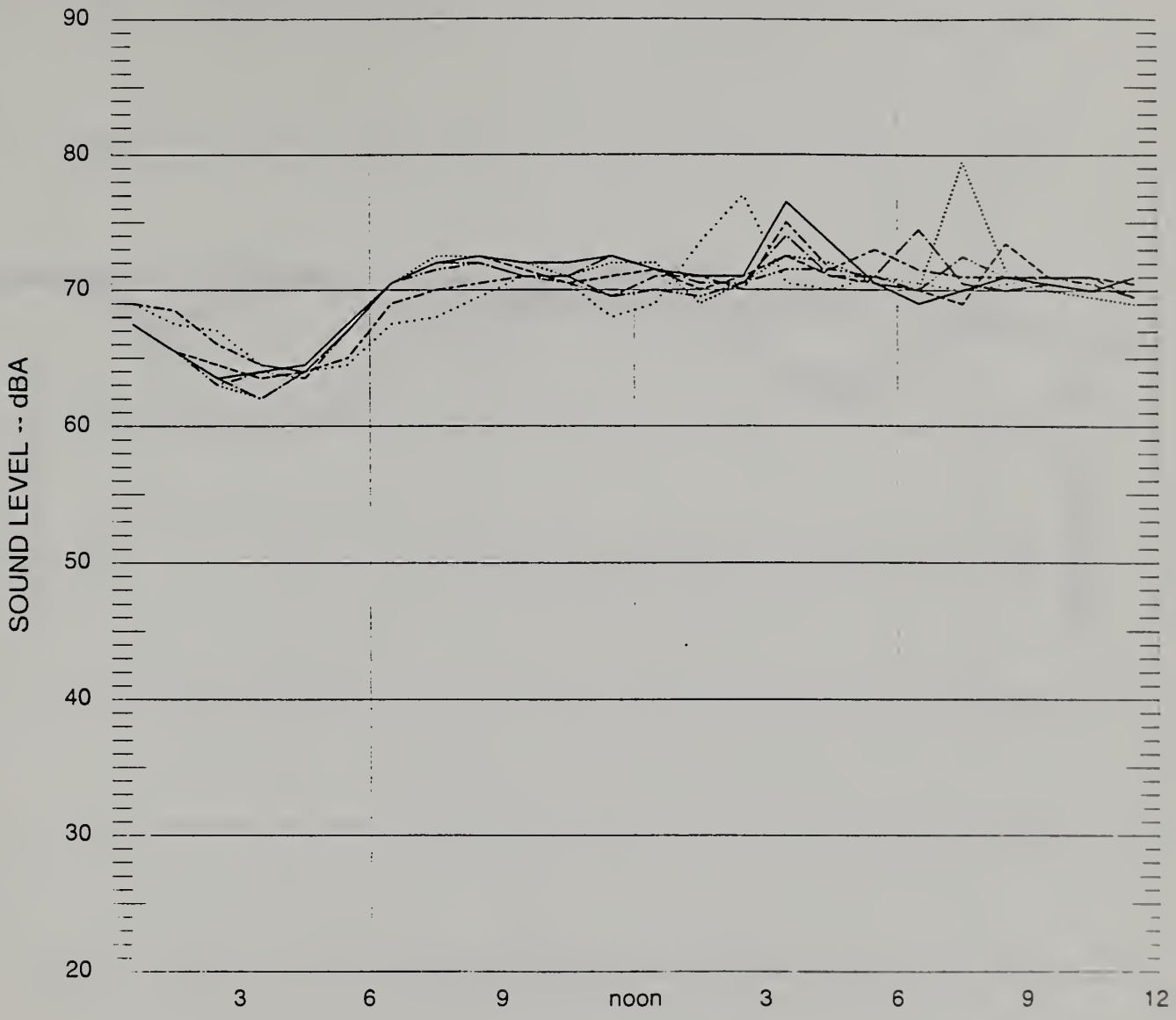



FIGURE 4 LOCATION 4 - 59 OCTAVIA: SUMMARY OF HOURLY EQUIVALENT NOISE LEVELS OVER DURATION OF SURVEY
5 TO 12 JULY, 1995

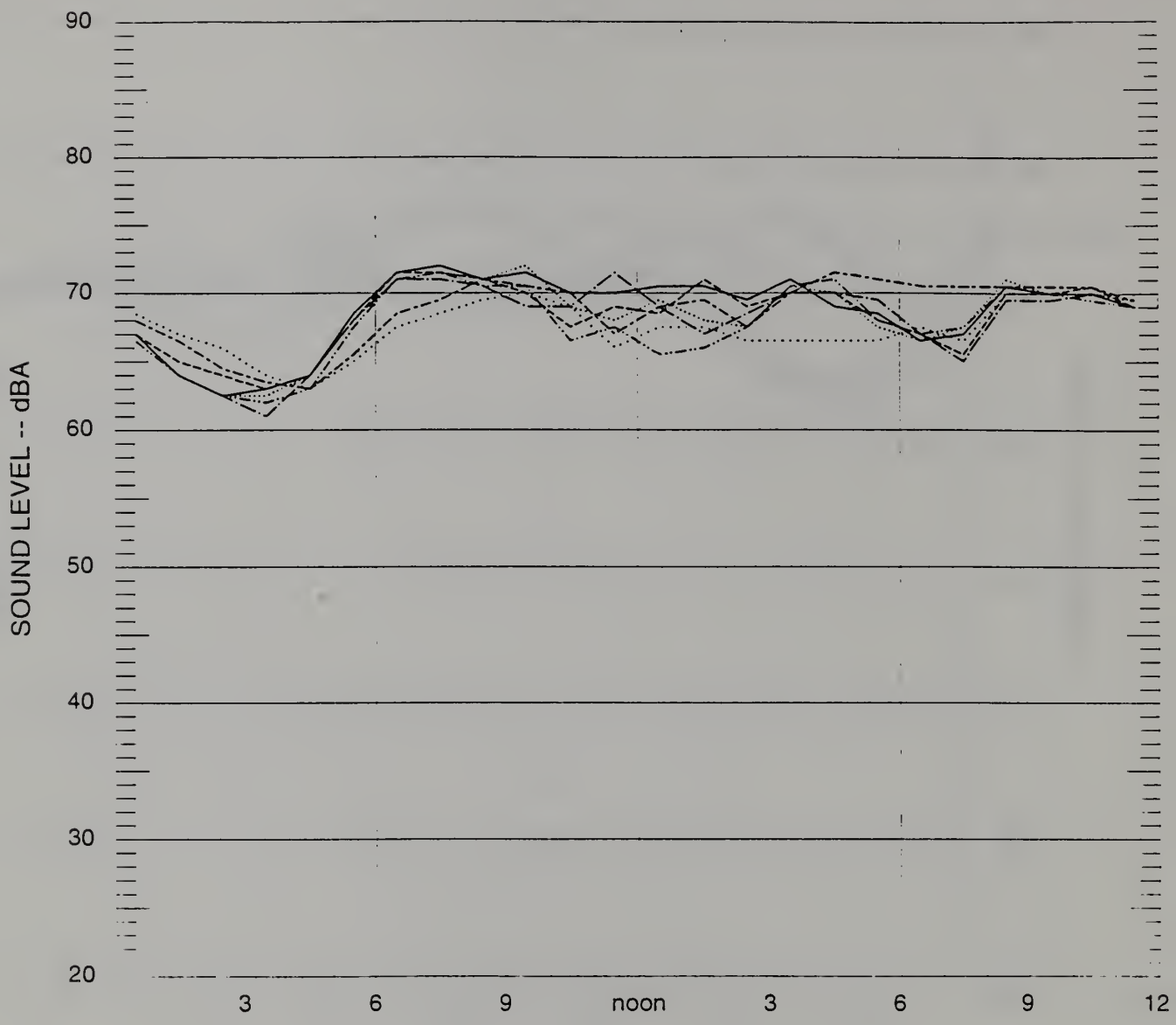



FIGURE 5 LOCATION 7 - 165 PAGE: SUMMARY OF HOURLY EQUIVALENT NOISE LEVELS OVER DURATION OF SURVEY 5 TO 12 JULY, 1995

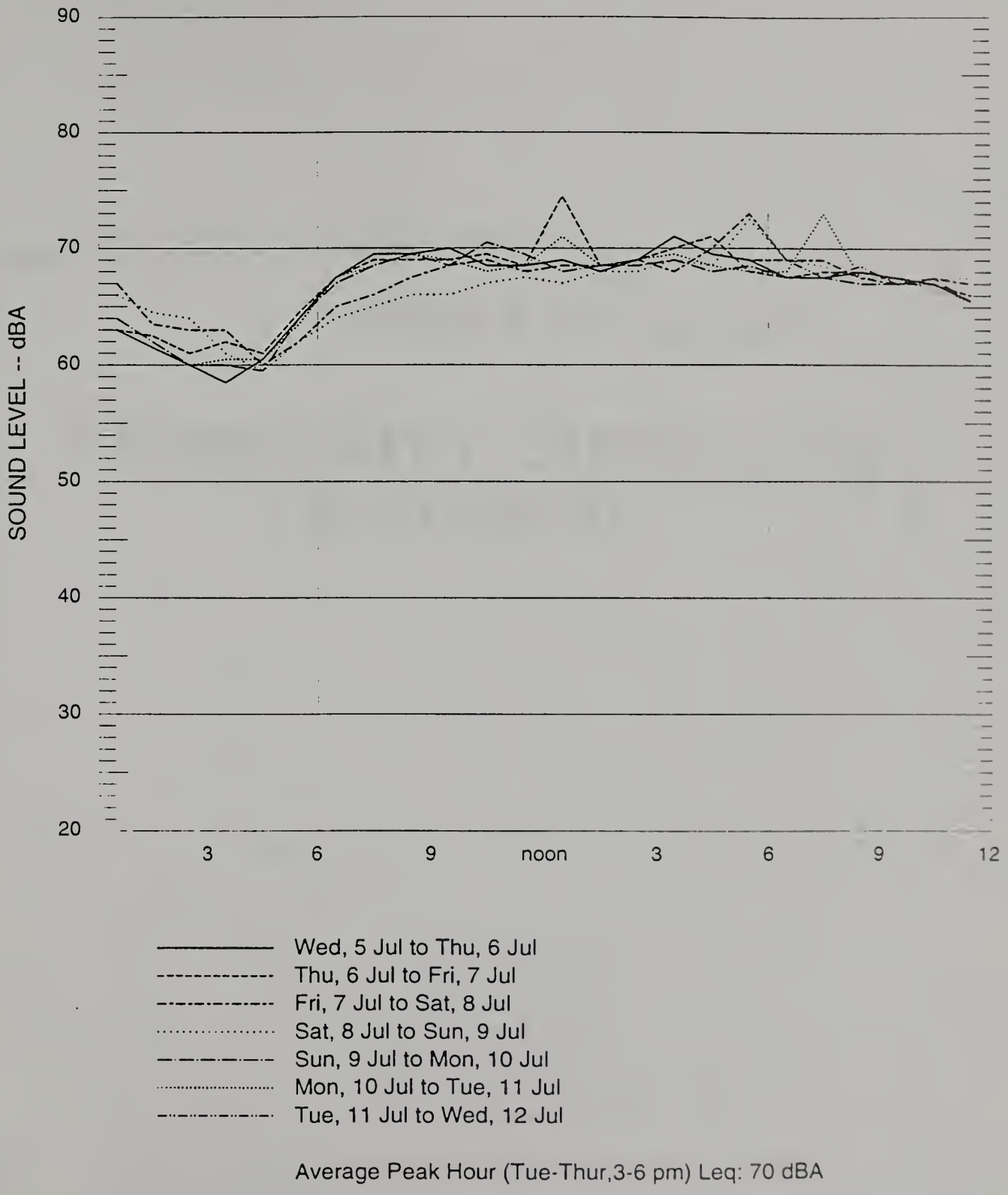



FIGURE 6 LOCATION 8 - 275-277 OAK: SUMMARY OF HOURLY EQUIVALENT NOISE LEVELS OVER DURATION OF SURVEY
5 TO 12 JULY, 1995

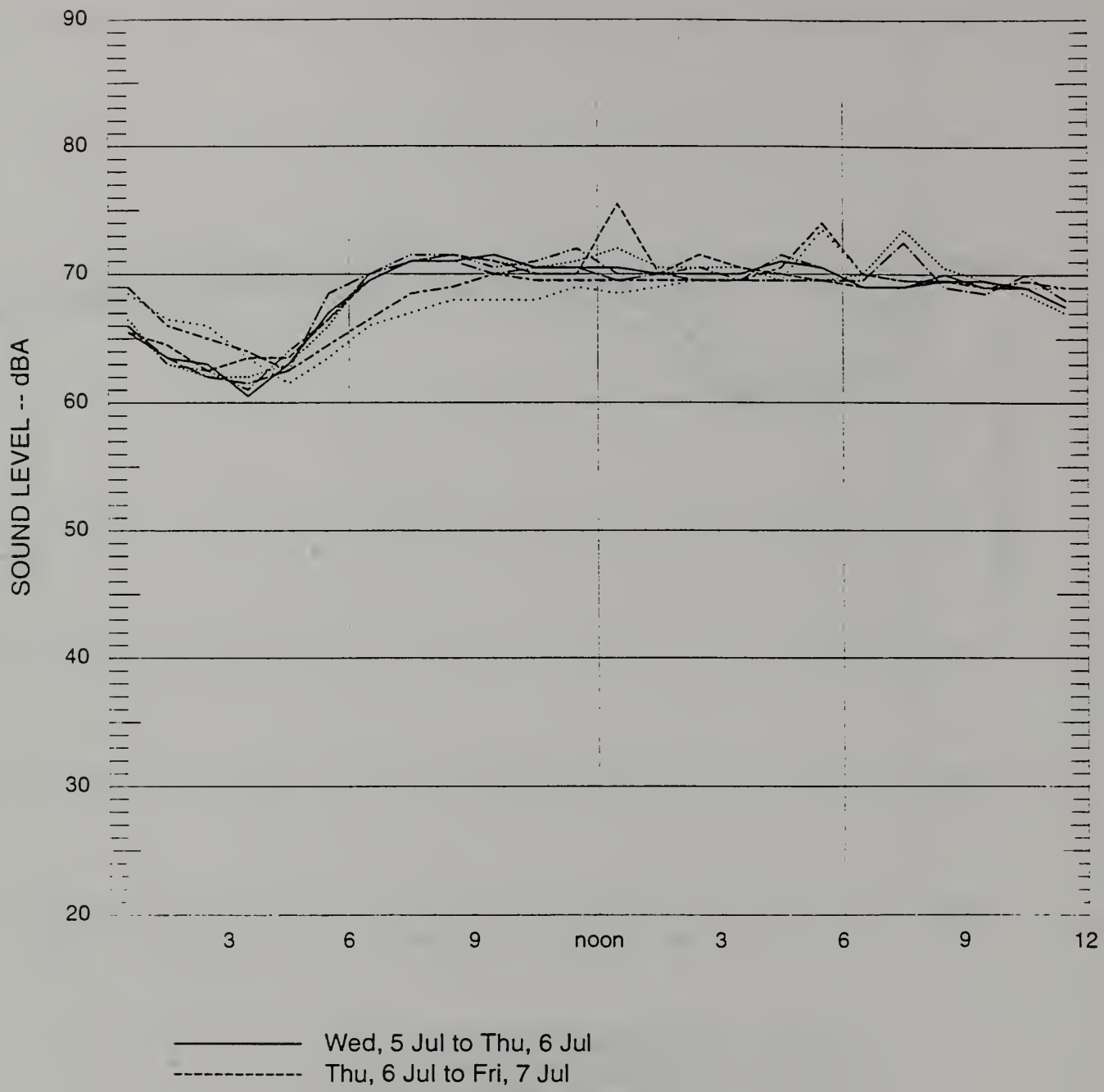



FIGURE 7 LOCATION 10 - 307 OAK: SUMMARY OF HOURLY EQUIVALENT NOISE LEVELS OVER DURATION OF SURVEY 5 TO 12 JULY, 1995

# PART B

# COMMUNITY OUTREACH MATERIAL

prepared for

DEPARTMENT OF PARKING AND TRAFFIC
CITY AND COUNTY OF SAN FRANCISCO

SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

# Central Freeway AREAWIDE TRAFFIC STUDY




**Central Freeway Areawide Traffic Study**
c/o Pittman & Hames Associates
400 Montgomery - Suite 1110
San Francisco, CA 94104


**IMPORTANT**
**Meeting Date**

Thursday, May 18th
*See details inside*

# CENTRAL FREEWAY AREAWIDE TRAFFIC STUDY

Phase II of the Central Freeway Areawide Traffic Study is underway. You are invited to attend the first community meeting on Thursday, May 18th (see details below). The key objective of the Phase II study is to select a locally preferred alternative for the Central Freeway, the elevated structure that connects Oak and Fell Streets with I-80 to the east and Highway 101 to the south. The purpose of this first community meeting is to help the study team and the Citizens Advisory Task Force identify new alternatives and refine alternatives that were developed in the Phase I study.

The Phase I study, sponsored by the Department of Parking and Traffic, was completed and adopted by the Board of Supervisors in September 1994. Its primary purpose was to determine if there were viable alternatives to retrofitting the remaining Central Freeway structure between the Oak/Fell and Mission/Van Ness ramps that should be studied further.

Based on the Phase I effort, which included three community meetings, several viable alternatives were identified. These included replacing the freeway with a single-deck structure, or demolishing the remaining structure and terminating the freeway north or south of Market Street. The study process also resulted in the Board of Supervisors expanding the original Hayes Valley/ Western Addition Task Force to include representatives from the Richmond, Panhandle, Sunset, Mission, Haight, South of Market and South Van Ness neighborhoods, as well as representatives of the S. F. County Transportation Authority Citizens Advisory Committee, the design profession and other citywide interests.

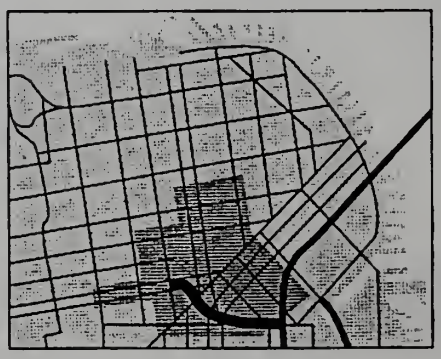
***If you are concerned about the Central Freeway's neighborhood impacts or its future role in moving traffic, please join representatives from the City, Caltrans, and the Citizens Advisory Task Force for this important Community Meeting.***

## *COMMUNITY MEETING*

**Sponsored by Department of Parking and Traffic**
**in cooperation with the Citizens Advisory Task Force**

Thursday, May 18, 1995
7:00 to 9:30 pm

**505 Van Ness Avenue**
**(between Golden Gate and McAllister)**
State PUC Building - East Auditorium
San Francisco, CA 94102
**For more information, call (415) 394-7900**



## ALTERNATIVE SOLUTIONS FOR THE CENTRAL FREEWAY

*The first of two citywide meetings, this will be an opportunity to help guide the selection of a locally preferred alternative for the Central Freeway.*

**Transit:** Lines 42*, 47, and 49 (*disabled accessible). Five blocks north of the Muni Metro Van Ness station.
**Access:** Meeting location is fully accessible to the disabled. A sign language interpreter is available by contacting Renee Faison (415) 554-9800 at least 72 hours before the meeting. Please refrain from using perfume, shaving lotion or other scented products so that those with environmental illnesses may also attend.
**Parking:** Limited on-street parking is available on Van Ness and adjacent streets. Off-street public parking is available in the Opera Plaza garage on Golden Gate Avenue. Bicycle parking is available on the Golden Gate Avenue side of the State building.

# Central Freeway Areawide Traffic Study
# Community Meeting
May 18, 1995

## Attendance Summary

## A. Estimated Attendance: 147 Total

| Attendance Breakdown | Count |
|---|---|
| Members of the Public | 117 |
| Task Force Members | 14 |
| City Departments (DPT, DCP, S.F. County Transportation Authority, Mayor's Mission Task Force, Muni, S. F. Redevelopment Agency, Board of Supervisors | 8 |
| Caltrans | 2 |
| Consultant Team | 5 |
| Press (Western Edition) | 1 |
| Total | 147 |

## B. Participation

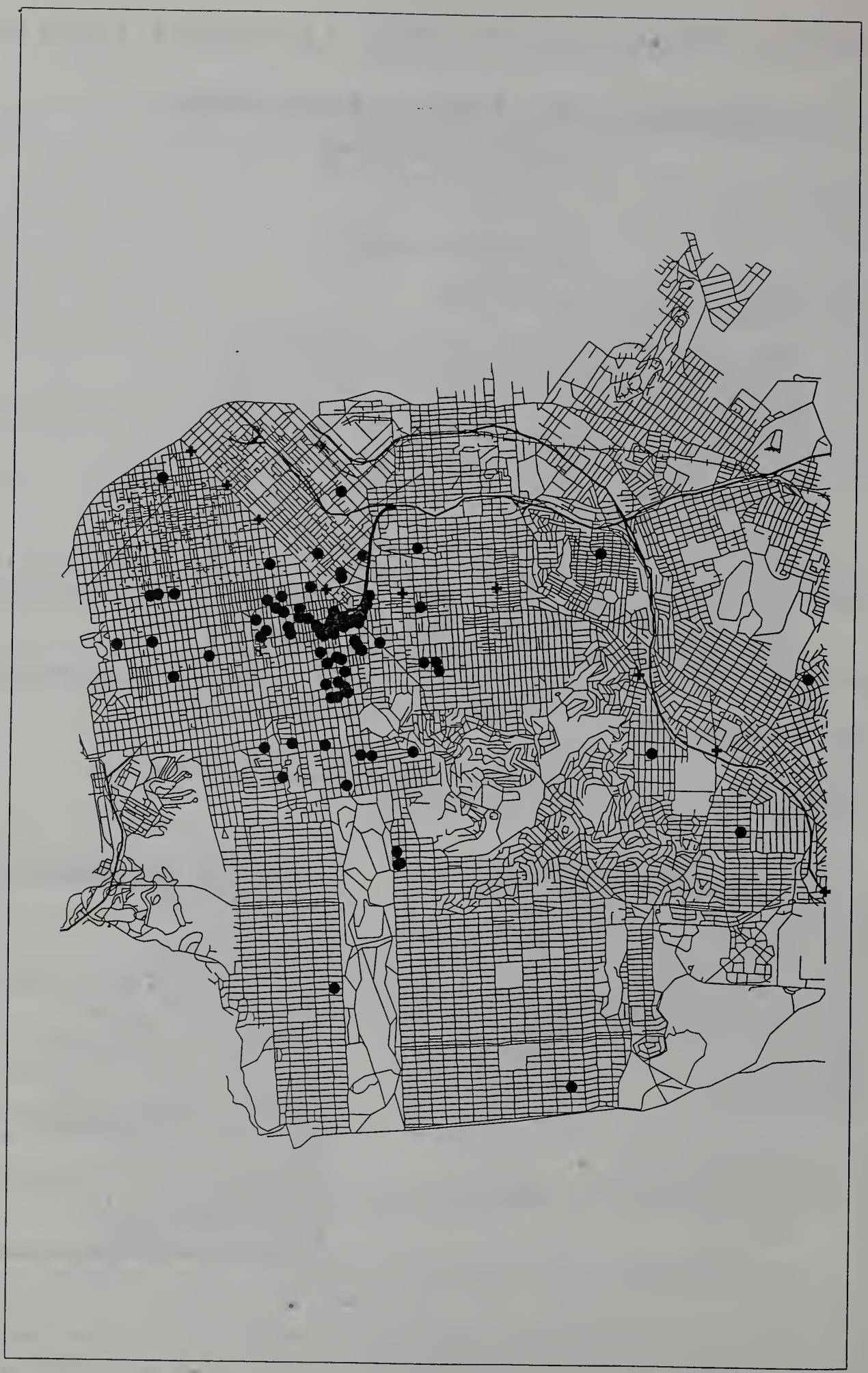
Approximately 13 neighborhoods, and 13 citywide groups, churches and organizations were represented at the community meeting (see details below).

| Neighborhoods * | |
|---|---|
| Castro (4) | Ingleside (1) |
| Cow Hollow/Marina (4) | Nob/Russian Hill (3) |
| Duboce Triangle (2) | Mission (4) |
| Excelsior (2) | South of Market (11) |
| Glen Park (1) | Sunset/Richmond (8) |
| Haight (7) | Western Addition (21) |
| Hayes Valley (45) | Other (4) |

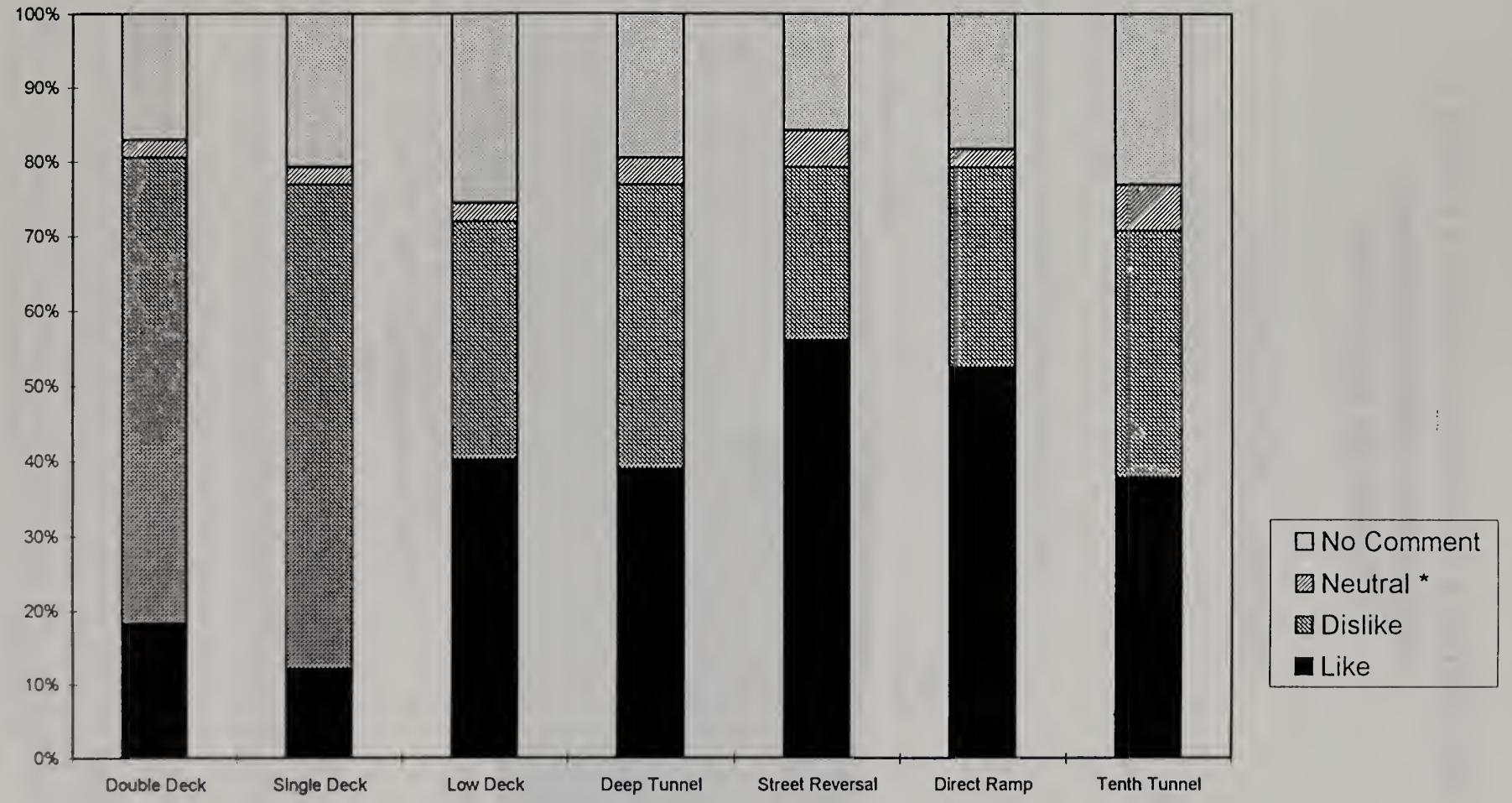
* Numbers in parentheses indicate total number of people from neighborhoods indicated above.

* People who live outside of the City or listed the address ivic organization.

| Neighborhood Organizations |
|---|
| Bethel AME Church |
| Civic Pride |
| First Baptist Church |
| Hayes Valley Neighborhood Coalition |
| Laguna-Octavia Association |
| Market Street Owners Association |
| Mint Hill Neighborhood Association |
| North of Panhandle Neighb.Assn. |
| St. Paulus S.F. Organizing Project |
| San Francisco Tomorrow |
| SomaWest |
| Taraval/Parkside Merchants |
| Union Street Merchants |



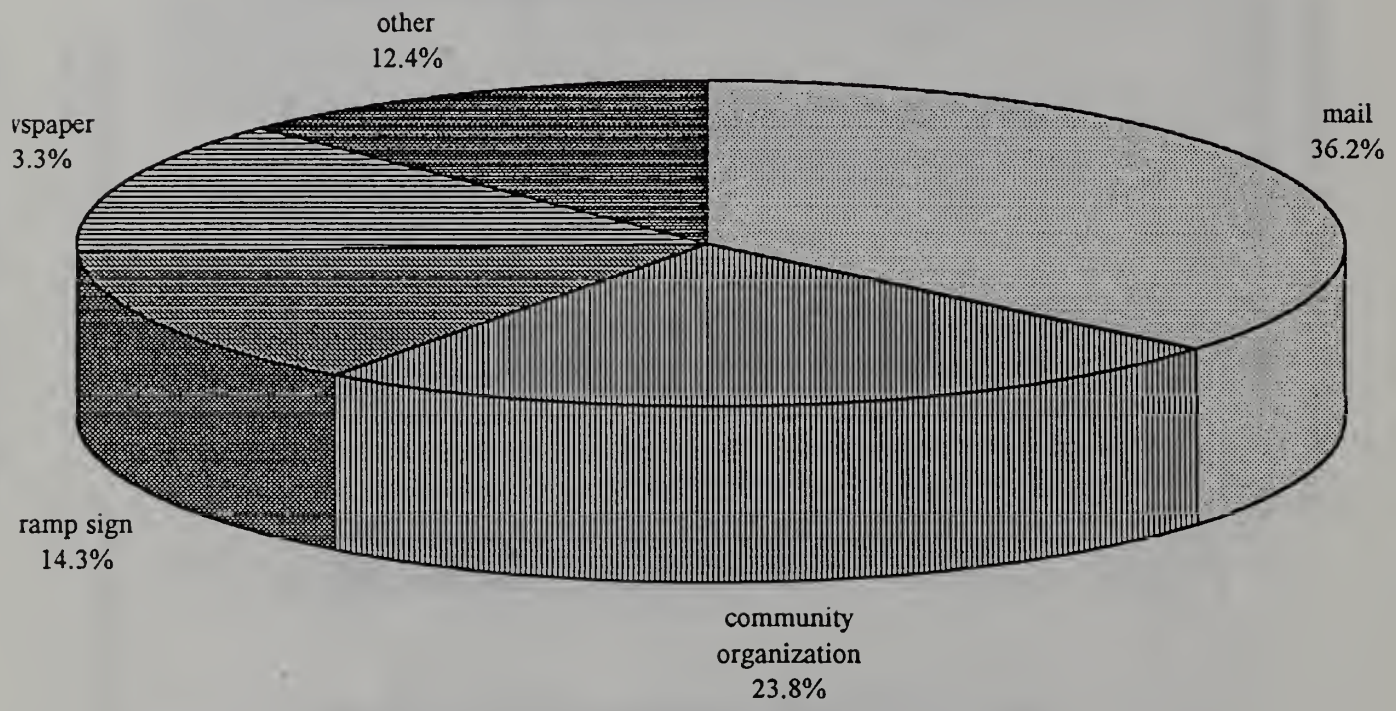
## Central Freeway Alternatives:
## All Responses to Survey Form




TOTAL RESPONSES: 82

* Neutral comments were questions or comments which gave no specific opinion regarding alternatives.

# Central Freeway Alternatives Study:
# How Attendees were Notified




Note: If a respondent indicated that they were notified by more than one outreach method, both methods were included in the total.
Percentages may not add up to 100.0% due to rounding.

# Central Freeway Areawide Traffic Study
# Community Meeting
# May 18, 1995

## Summary of Public Comments

1) **Gilbert Samms - Bethel AME Church**

a) Concerned that the need for local access is not being addressed in the study. Already difficult getting in and out of the neighborhood. Fears removal of the freeway would compound the problem of access.

2) **Elizabeth Hawthorne-Waite - Van Ness Avenue Resident**

a) Concerned about the extra flow of traffic through Turk Street, where the 911 emergency building is going to be rebuilt and enlarged. Easy access for their emergency vehicles is needed should any civic disasters occur.

3) **Rick Goldman - Sunset**

a) Feels there definitely need to be some off-ramps north of Market Street. Something needs to be done to get people to the north side of City. Street reversal is a good idea, but would still like to maintain at least one off-ramp at least.

4) **Luis Pardo - Mission**

a) Concerned that a lot of the needs of Valencia Street are not being taken into consideration. Would like to see a greater effort to reach out to the Mission.
b) Neighborhood is blocked from reaching Market Street by the overpass over Valencia Street.
c) Also concerned that a public transit corridor be included instead of having so many freeways that destroy the city.

5) **Dave Enfield - Western Addition**

a) Agrees that there is a need for access over Market Street.
b) Believes the deep tunnel could serve the traffic patterns, but wants to know if the old freeway will remain standing while the deep tunnel is being built.
c) Wants a plan most like the traffic patterns before earthquake.

6) **Don Abare - South of Market**

a) Wants more research done to determine if the old freeway can remain while a deep tunnel is being built?
b) Regardless of cost, feels that over the long term, for aesthetics, the deep tunnel is the best.

7) **Norman Rolfe - San Francisco Tomorrow**

a) Wants a lot more emphasis on transit in all of the present alternatives, including exclusive transit lanes.
b) Concerned that some of the alternatives put a lot of traffic on Van Ness Avenue and Market Street intersections at South Van Ness and Mission Street. Wants to see an exclusive transit right-of-way or median on Van Ness Avenue. This would give transit an advantage on Van Ness Avenue, prompting more people to use it, which would reduce traffic.

c) Alternatives that call for reversal of streets south of Market have Muni lines on some of these streets. Rerouting of these lines should be looked into.

**8) Robin Levitt - Hayes Valley**

a) None of the plans address the problem of traffic in the Hayes Valley neighborhoods.
b) No one is addressing quality of life issues in these neighborhoods.
c) Plans don't address traffic problems on Fell and Oak Streets, which is a major problem.
d) Feels plans are all automobile driven, and favors tearing down part of the Central Freeway.

**9) Doug Prudden - Hayes Valley**

a) If the costs for a shallow tunnel are reasonable, then it is a wonderful idea for pushing traffic under Octavia Street.
b) Concerned about traffic continuing while the tunnel is under construction.
c) Worried about the safety of the children around Octavia Street without a tunnel. Would like to see a raised crossover or some sort of safety device on whatever cross streets are affected.
d) Favors a combination of Alternatives 3 and 7.

**10) Michael Hohmeyer - Western Addition**

a) Feels that the alternatives that include an overpass over Market Street do nothing about separating Gough and Franklin Street traffic from Oak and Fell Street traffic.

**11) Patricia Walkup - Hayes Valley**

a) Feels that the Hayes Valley/ Western Addition neighborhoods have been greatly impacted by the volume of traffic.
b) Concerned that many of the alternatives continue to dump traffic into this area.

**12) Francee Covington - Hayes Valley**

a) Feels that Hayes Valley has too much traffic. Fell and Oak Streets were never designed to handle the volume of traffic they do.
b) Perceives a real discrepancy between the speed of resolving the Central Freeway problem by Caltrans in comparison to the Cypress structure in Oakland.

**13) Shane Mitchell - Hayes Valley**

a) Feels that the Central Freeway structure fuels the crime underneath it, and provides easy access for prostitution.
b) Wants to see the South of Market plan incorporate aspects of other alternatives to improve access.

**14) Niko Letunic - San Francisco Bicycle Coalition**

a) Concerned that Guerrero Street squeezed out pedestrians and cyclists by narrowing sidewalks and car lanes, making driving easier and public transportation less desirable.
b) Feels that driving and single-occupancy-vehicles should be discouraged. Alternatives should not increase automobile capacity, and make auto access.

**15) Judith Wettig - Unidentified**

a) Believes that Gough Street traffic is due to people who are trying to get back on the highway. Should be considered before a structure that works is torn down.

16) **Jim Houllion - Western Addition**

a) Believes the structure needs to be torn down, that it isn't going to withstand a major earthquake.
b) Likes the idea of grand boulevards like those at the Embarcadero.
c) Wants the Central Freeway torn down and on and off-ramps built directly to South Van Ness to eliminate the bottleneck.
d) Favors the underground tunnels for Gough and Market Street.

17) **Lesley Leonhardt - Marina/Cow Hollow**

a) Represents the merchants from the north neighborhoods (i.e. Union Street, the Marina, and North Beach). These merchants are concerned they are going to be once again isolated. Their economic vitality was severely damaged after the Loma Prieta and only recently have the people returned. Wants to make sure alternatives consider access to northern neighborhoods of the City.
b) Feels that people need to be funneled across town quickly, easily and efficiently. Public transportation is not convenient to everyone coming from the Eastbay.

18) **Ric Duran - Hayes Valley**

a) Believes that Central Freeway needs to be removed.
b) Expressed concern that other options be considered other than the seven presented today.

19) **Peter Roprisch - Haight**

a) Worried about the cost of rebuilding an elevated structure that is likely to be brought down in an earthquake once again.

20) **Bill Geaziano - South of Market**

a) Feels that most of the plans put the burden on South of Market, which already has two freeway structures there. Believes South of Market is already over burdened.

# CENTRAL FREEWAY AREAWIDE TRAFFIC STUDY

## *Your Comments, Please!*

Please feel free to provide additional comments or ideas concerning the Central Freeway Alternatives or tonight's meeting below. You can leave this form in the designated boxes before you leave. Your thoughts and ideas are welcomed.

Optional:

Name: _____

Address: _____

Phone: _____

# Central Freeway Alternatives

Neighborhood_____
(Sunset, Mission, etc.)

Organization/Affiliation_____

How did you hear about tonight's meeting?

| _____ | _____ | _____ | _____ | _____ | _____ |
|---|---|---|---|---|---|
| Notice in mail | Community Organization | Fell Street Ramp Sign | Newspaper Ad/Notice | Radio | Other |

**Please comment briefly on the alternatives that have been discussed tonight.**

**Alternative 1: Double-Deck Retrofit** (Existing Structure)

**Alternative 2: Single-Deck Retrofit** (Hybrid)

**Alternative 3: Low Deck Over Market**

**Alternative 4: Deep Tunnel Under Market**

**Alternative 5: Street Reversal South of Market**

**Alternative 6: Direct Ramp to South Van Ness**

**Alternative 7: Tenth Street Tunnel**

**Other Alternatives/Comments/Suggestions??**

**Please use the back of this page.**

***PLEASE*** **REMOVE THIS FORM AND DROP IT IN THE DESIGNATED BOXES BEFORE YOU LEAVE TONIGHT. THANK YOU.**

DPT Central Freeway Areawide Traffic Study
c/o Pittman & Hames Associates
400 Montgomery - Suite 1110
San Francisco, CA 94104

Address Correction Requested

1st Class
U. S. Postage Paid
Permit 11882
San Francisco, CA

**IMPORTANT**
**Meeting Date**

Thursday, September 14
*See details inside*

# Central Freeway AREAWIDE TRAFFIC STUDY

sponsored by
DEPARTMENT OF PARKING & TRAFFIC
CITY AND COUNTY OF SAN FRANCISCO
in cooperation with the
CITIZENS ADVISORY TASK FORCE FOR THE CENTRAL FREEWAY

## Citywide Public Meeting

(See details inside)

**Thursday, September 14, 1995**
**7:00 to 9:30 pm**
**505 Van Ness Avenue - State PUC Auditorium**
(Between Golden Gate and McAllister)

**Transit:** Lines 42*, 47, and 49 (*disabled accessible). Meeting location is five blocks north of the Muni Metro Van Ness station

**Parking:** On-street parking is *extremely* limited due to scheduled events at Davies Symphony Hall and the Opera House. Off-street paid parking is available at the Opera Plaza garage on Golden Gate Avenue between Van Ness and Franklin and the Civic Center Garage on McAllister between Polk and Larkin. Free off-street public parking may be available in the state-owned parking lot at the northeast corner of Franklin and Golden Gate (call 554-2397 to confirm). Bicycle parking is available on the Golden Gate Avenue side of the State building.

**Access:** Meeting location is fully accessible to the disabled. A sign language interpreter is available by contacting Renee Faison (415) 554-9800 at least 72 hours before the meeting. Please refrain from using perfume, shaving lotion or other scented products so that those with environmental illnesses may also attend.

# CENTRAL FREEWAY UPDATE

*Department of Parking and Traffic and Citizens Advisory Task Force*

*Weeks Away from Making a Recommendation on the Central Freeway*

Phase II of the Central Freeway Areawide Traffic Study is near completion. You are invited to attend the second **Central Freeway Citywide Public Meeting on Thursday, September 14th** (see details below). The purpose of the meeting is to receive public input on the evaluation and ranking of Central Freeway alternatives prior to making recommendations to the Board of Supervisors on a locally preferred alternative. The Board is expected to make its final decision and recommendation to Caltrans in early October.

At the first community meeting held May 18, members of the public provided input on a number of alternatives that had been developed by Caltrans, the consultant team, and the Citizens Advisory Task Force. Following that meeting, the Department of Parking and Traffic (DPT) and its consultants worked closely with the Task Force and members of the public to refine alternatives that would be considered in the Phase II study.

These include the:

**Caltrans Double Deck Retrofit** - Structurally repairs existing freeway to current seismic standards.

**Caltrans Hybrid Retrofit** - Demolishes portions of freeway, and retrofits and connects remaining portions of freeway, resulting in a single-deck structure terminating at Fell and Laguna Streets.

**Low-Deck over Market** - Demolishes existing freeway north of Mission Street and constructs a single-deck freeway over Market Street.

**Deep Tunnel Under Market** - Removes freeway and replaces it with a tunnel beginning just east of Valencia Street and ending at Oak and Fell Streets.

**Freeway Traffic Dispersal** - Terminates the freeway south of Market Street and reverses the direction of several south of Market streets in order to disperse traffic from the freeway onto several surface routes.

**Direct Ramp to South Van Ness** - Terminates freeway south of Market Street and provides a new ramp connection to South Van Ness Avenue.

**Otis/Duboce Terminus** - Ends freeway south of Market Street at Otis and Duboce Streets and provides new on-ramps on Duboce between Mission and Valencia, and on Otis between South Van Ness and Duboce.

Over the past several months, the consultants and Task Force evaluated and began to rank and further refine the alternatives listed above. The alternatives, as well as the consultants' and Task Force's evaluation and ranking, will be presented in detail at the September 14 Citywide Public Meeting. Your input is needed at the meeting to help guide final recommendations by City staff and the Task Force on a locally preferred alternative.

# Citywide Public Meeting

**Sponsored by Department of Parking and Traffic**
**in cooperation with the Citizens Advisory Task Force**

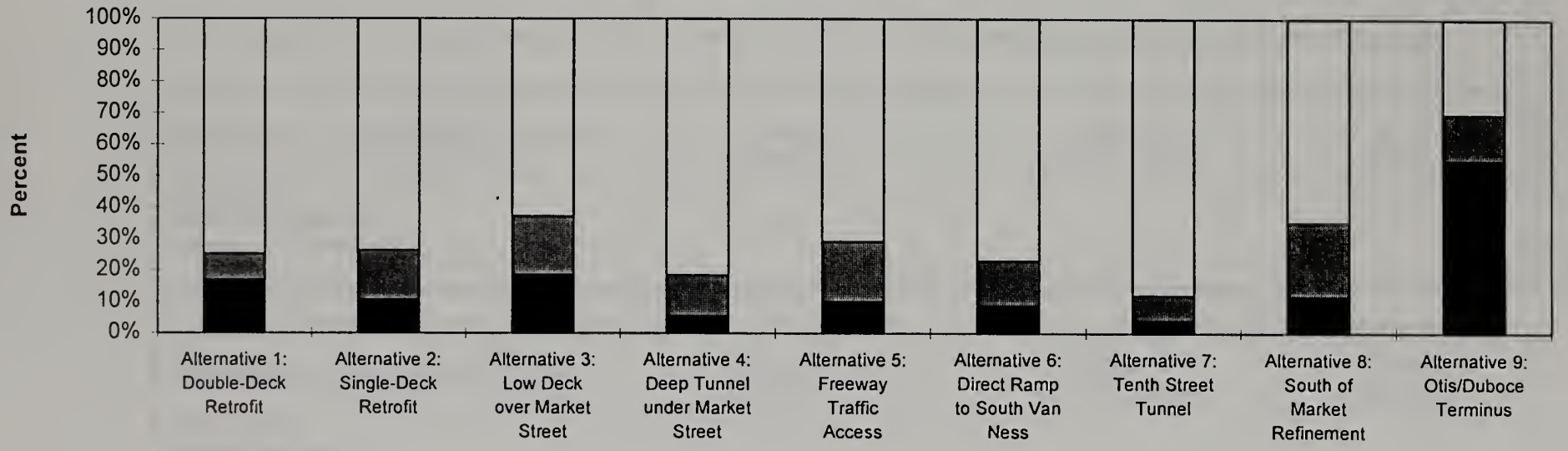
**Thursday, September 14, 1995**
**7:00 to 9:30 pm**
**505 Van Ness Avenue**
**(between Golden Gate and McAllister)**
State PUC Building - East Auditorium
San Francisco, CA 94102

**For more information, call 554-2397 (English ) or 554-2369 (Spanish)**

## Evaluation and Ranking of Alternatives

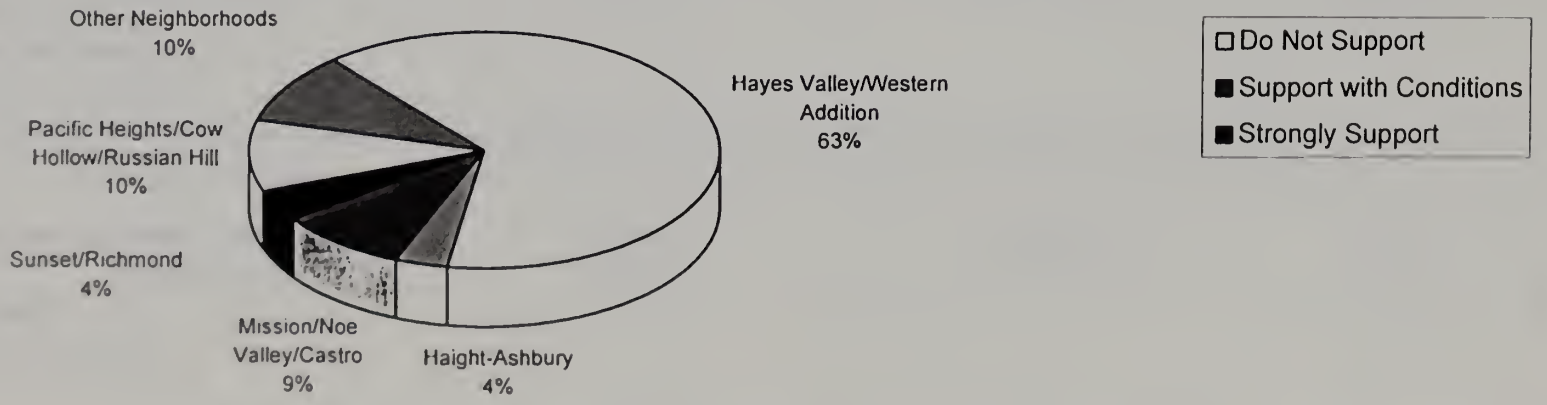
*If you travel, commute, live, or work in the Central Freeway corridor, your attendance at this public meeting is critical. This will be the last public meeting before City staff and the Citizens Advisory Task Force develop their recommendations to the Board of Supervisors on a locally preferred alternative.*

## Responses to Central Freeway Alternatives Survey
## Community Meeting, September 14, 1995




## Responses to Central Freeway Alternatives, by Neighborhood

Total Number of Responses: 113



# CENTRAL FREEWAY ALTERNATIVES

Neighborhood _____
(e.g., Sunset, Mission, etc.)

Organization/Affiliation _____

How did you hear about tonight's meeting?

_____ Notice in mail
_____ Community Organization
_____ Signs Near Freeway
_____ Newspaper Notice
_____ Other ?

**Please circle *one* of the options below for each of the Central Freeway Alternatives discussed tonight.**

| **Alternative 1: Double-Deck Retrofit** | Strongly Support | Support with Conditions | Do Not Support |
|---|---|---|---|
| **Comments:** (Reasons for Support or explanation of conditions) | | | |

| **Alternative 2: Single-Deck Retrofit** | Strongly Support | Support with Conditions | Do Not Support |
|---|---|---|---|
| **Comments:** (Reasons for Support or explanation of conditions) | | | |

| **Alternative 3: Low Deck Over Market Street** | Strongly Support | Support with Conditions | Do Not Support |
|---|---|---|---|
| **Comments:** (Reasons for Support or explanation of conditions) | | | |

| **Alternative 4: Deep Tunnel Under Market Street** | Strongly Support | Support with Conditions | Do Not Support |
|---|---|---|---|
| **Comments:** (Reasons for Support or explanation of conditions) | | | |

**Alternatives continue on reverse side.**

| **Alternative 5: Freeway Traffic Access Dispersal** | Strongly Support | Support with Conditions | Do Not Support |
|---|---|---|---|
| **Comments:** (Reasons for Support or explanation of conditions) | | | |

| **Alternative 6: Direct Ramp to South Van Ness** | Strongly Support | Support with Conditions | Do Not Support |
|---|---|---|---|
| **Comments:** (Reasons for Support or explanation of conditions) | | | |

| **Alternative 7: Tenth Street Tunnel** | Strongly Support | Support with Conditions | Do Not Support |
|---|---|---|---|
| **Comments:** (Reasons for Support or explanation of conditions) | | | |

| **Alternative 8: South of Market Refinement** | Strongly Support | Support with Conditions | Do Not Support |
|---|---|---|---|
| **Comments:** (Reason for Support or explanation of conditions) | | | |

| **Alternative 9: Otis/Duboce Terminus** | Strongly Support | Support with Conditions | Do Not Support |
|---|---|---|---|
| **Comments:** (Reason for Support or explanation of conditions) | | | |

***PLEASE*** **REMOVE THIS FORM AND DROP IT IN ONE OF THE DESIGNATED BOXES BEFORE YOU LEAVE TONIGHT. THANK YOU.**

Issue No. 1 July 1995

DPT

# Working Toward a Solution for the Central Freeway

A newsletter sponsored by the San Francisco Department of Parking and Traffic in cooperation with the Citizens Advisory Task Force for the Central Freeway

## Phase II Study In Progress

*City Reaches Critical Stage in Deciding the Future of the Central Freeway.*

*By October, the City and Caltrans will decide whether to retrofit, rebuild or tear down the double-deck segment of the Central Freeway.*

*Major Goal of Phase II Study is to Build a Consensus on Preferred Alternative*

*The study involves a public involvement and technical work program. The public involvement program establishes a decision making framework which includes sponsoring citywide and Task Force meetings. The technical program is an evaluation of alternatives that analyzes freeway operations and surface street traffic, noise and visual impacts, public transit impacts, project costs and funding sources.*

## Opportunities for Public Involvement

### UPCOMING MEETINGS

**Important Citywide Meeting**
*Evaluation of Alternatives*
**Thursday * September 14**
7:00-9:30 pm
505 Van Ness Avenue
San Francisco, CA 94102

**Citizens Advisory Task Force Meetings**
**August 7 * August 21 * August 28 * * September 18 ***
7:00-9:00 pm
1660 Mission - Room 2001
San Francisco, CA 94103

**Since the 1989 Loma Prieta earthquake, the future of the Central Freeway** has remained undecided. The City has now reached a critical stage where it must decide on a final solution for the quake-damaged freeway. After demolition of the Gough and Franklin ramps, the Board of Supervisors recognized the impact of the freeway on the Hayes Valley and Western Addition neighborhoods and decided that no new above-ground ramps would be constructed north of Fell Street. The Board also requested a study to improve traffic conditions in the Central Freeway corridor, which resulted in the Phase I Central Freeway Areawide Traffic Study.

The Phase I study, completed in September 1994, determined that there were alternatives to the full retrofit of the freeway that should be studied. As a result, in October 1994, the Board of Supervisors requested Caltrans to delay retrofit of the Central Freeway until the City could conduct further studies and select a locally preferred alternative.

The Phase II Central Freeway Areawide Traffic Study will be completed this September. The study is being prepared by the San Francisco Department of Parking and Traffic (DPT) and a consultant team in cooperation with a 30 member Citizens Advisory Task Force. The Task Force was appointed by the Board of Supervisors to represent neighborhoods affected by the freeway as well as citywide interests. The Board of Supervisors is expected to decide on a preferred alternative by fall of this year based on the Phase II study, and input from the Citizens Advisory Task Force and the public.

**There are several opportunities for public involvement during the study.** The first of two citywide meetings was held May 18 to receive public input on alternatives for the Central Freeway. About 145 people attended, representing 13 neighborhoods and 13 citywide groups. Over half those attending lived in Hayes Valley and Western Addition. Meeting participants were provided an opportunity to formally write their opinions about proposed alternatives. Most opposed any retrofit or rebuild alternatives, but favored alternatives that would demolish the existing freeway and provide either a single-deck structure or reroute traffic on surface streets. On the other hand, DPT has received a number of calls and letters from people who did not attend the May 18 meeting which support a rebuild or retrofit alternative.

**The second citywide meeting will be held on Thursday, September 14** to evaluate alternatives and receive input on a preferred alternative. If you live, work, travel or commute in the Central Freeway corridor, this will be a critical meeting to attend.

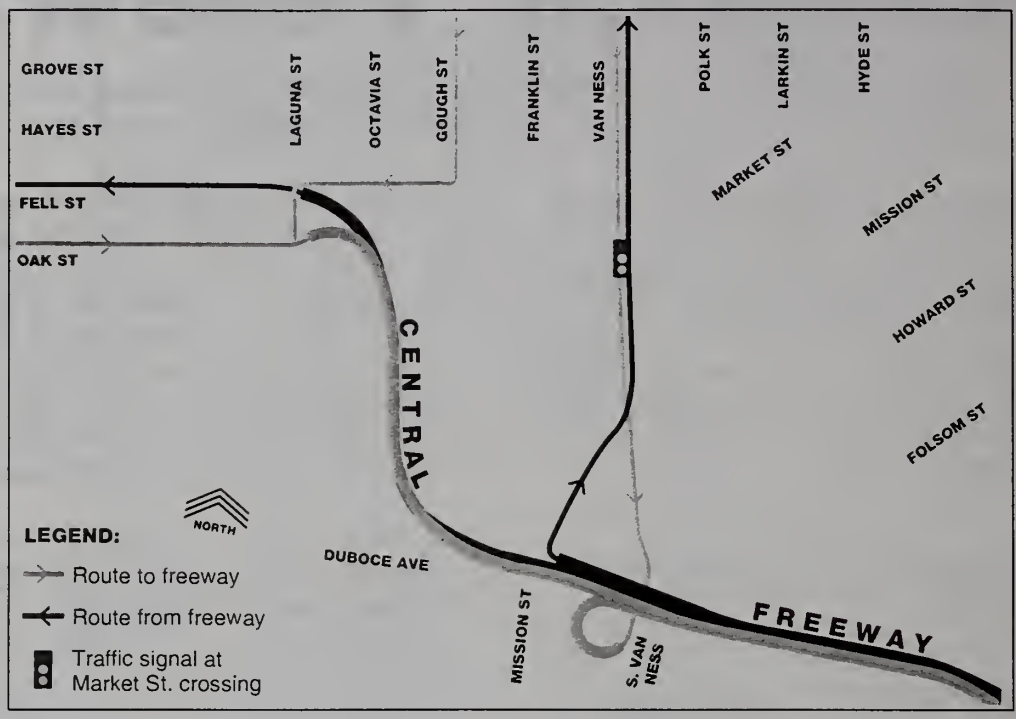
The Citizens Advisory Task Force meets the first Monday of each month, except on holidays. Task Force meetings are open to the public. The meetings are an opportunity for the public to provide input on the proposed alternatives and issues that are being analyzed in the Phase II study.

# PROJECT ALTERNATIVES

The Department of Parking and Traffic and its consultant team have worked closely with the Citizens Advisory Task Force to identify a broad range of Central Freeway alternatives. The alternatives currently under study have been developed based on input from the consultants, Task Force, Caltrans, and general public. The Central Freeway study area and alternatives are described below and on the opposite page.

## Where is the Central Freeway ?

The Central Freeway is the elevated structure that extends from Oak and Fell Streets to I-80 east and the Bay Bridge/101 south. It consists of a steel single-deck structure east of Mission Street, and a reinforced concrete double-deck structure west of Mission Street. The focus of the Phase II study is the concrete structure between the Oak/Fell and Mission/South Van Ness ramps.



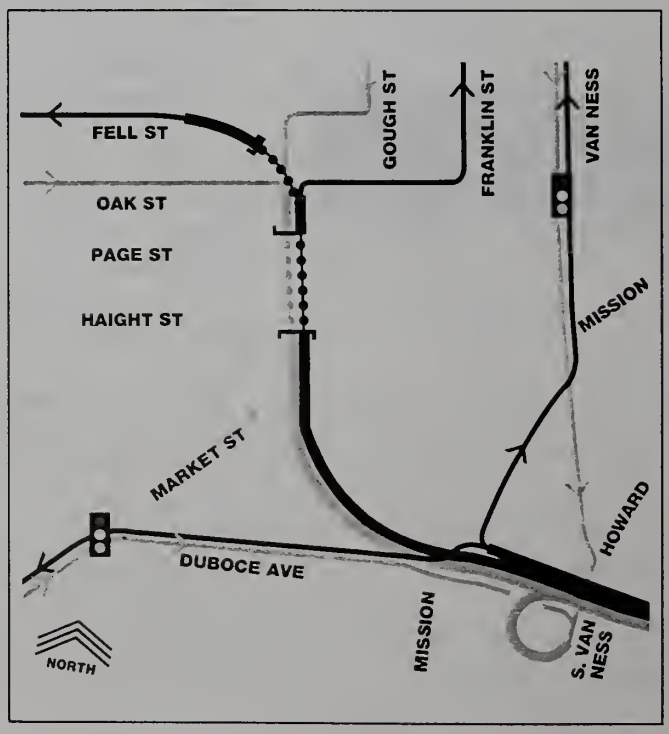

## Caltrans Retrofit Alternatives

**(see existing freeway shown above)**

Caltrans has proposed two methods of retrofitting the existing freeway: 1) the double-deck retrofit and 2) the "hybrid" retrofit. The double-deck retrofit is a structural upgrade of the existing concrete double-deck portion of the freeway. Traffic patterns would remain as they are today, although some limited changes might be made. The hybrid retrofit would demolish portions of the freeway, and retrofit and connect remaining portions of the upper and lower decks, resulting in a single-deck freeway terminating at Fell and Laguna Streets. Traffic would continue to use a portion of the freeway during construction of both of these alternatives.

## Low Deck Over Market Street

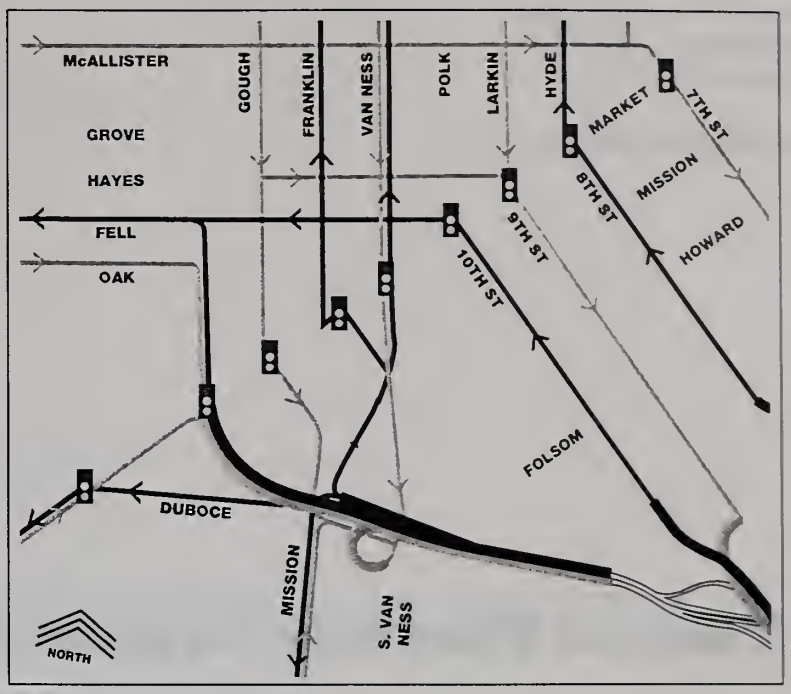
This concept was developed by San Francisco Tomorrow. It would demolish the existing freeway north of Mission Street and construct a single-deck freeway over Market Street. The new single-deck structure would go under Haight, Page and Oak Streets where it could be either open cut or covered. This alternative improves access to the Franklin/Gough Street corridor from the Central Freeway. It would require closing the freeway during construction.

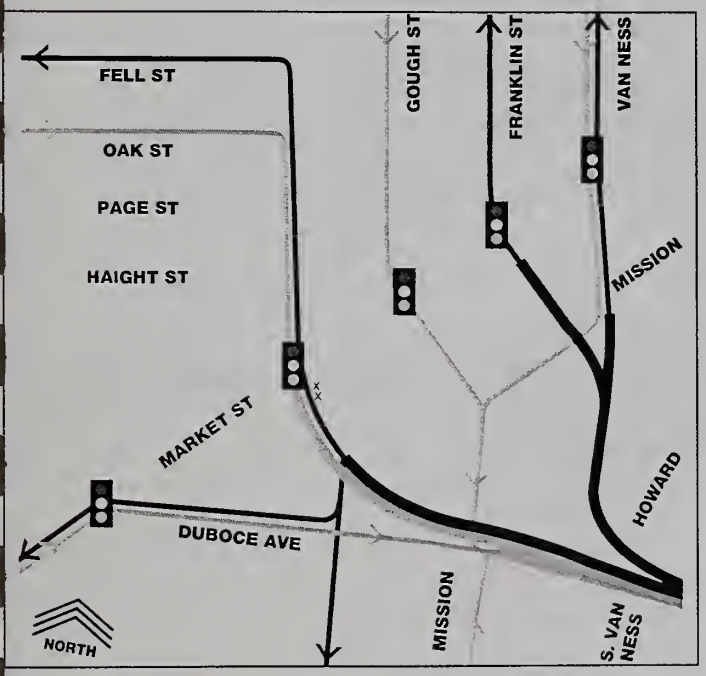


# CURRENTLY UNDER STUDY

## South of Market Street Reversal

This alternative is one of several concepts developed by the Citizens Advisory Task Force as the result of two design workshops held in April. It would terminate the freeway south of Market Street and reverse the direction of several south of Market streets in order to disperse traffic from the freeway onto several routes. This alternative creates a surface street in the existing Central Freeway right-of-way along Octavia Street and allows traffic currently using northbound 9th Street to use both 8th and 10th Streets instead.




## Direct Ramp to South Van Ness

The Citizens Advisory Task Force also developed this alternative. It would terminate the freeway south of Market Street and provide a new ramp connecting to South Van Ness Avenue and a new extension of Franklin Street south of Market Street.

## Tenth Street Tunnel (not shown)

This alternative was developed by the consultant team. It would terminate the freeway south of Market Street and provide a shallow tunnel under Market Street and above the Muni Metro at 10th Street.

## Comments on the Alternatives?

Do you have comments or opinions concerning the proposed Central Freeway alternatives? See the back page of this newsletter for information on how to call the Central Freeway Hotline or contact the Department of Parking and Traffic

**Also, be sure to attend the Citywide Meeting on Thursday, September 14 (see details on the front page)** This will be the last community meeting before the Phase II Central Freeway Areawide Traffic Study is completed

DPT **Central Freeway Areawide Traffic Study**

c/o Pittman & Hames Associates
400 Montgomery - Suite 1110
San Francisco, CA 94104

**Address Correction Requested**

1st Class Pre-Sort
U. S. Postage Paid
Permit 11882
San Francisco, CA

# Central Freeway Areawide Traffic Study

*Questions?* *Comments?* *Need More Information?*

| Call | Write | Use Form Below |
|---|---|---|
| Central Freeway Hotline **415-554-2397** for current information on the study and upcoming meetings. | Dept. of Parking and Traffic c/o Mr. Jerry Robbins 25 Van Ness Avenue - Suite 345 San Francisco, CA 94102 FAX 415-554-2352 | to voice your concerns about the proposed Central Freeway alternatives. |

**Please Be Sure to Attend** ● **Central Freeway CITYWIDE MEETING** ● **Thursday, September 14**

**7:00 to 9:30 pm**

**505 Van Ness Avenue, San Francisco, CA**

**Mail to:**

Department of Parking and Traffic
c/o Mr. Jerry Robbins
25 Van Ness Avenue - Suite 345
San Francisco, CA 94102

*Please return form by Friday, August 18.*

Name_____

Neighborhood_____

Address_____

Zip_____

**Comments on Central Freeway Alternatives:**

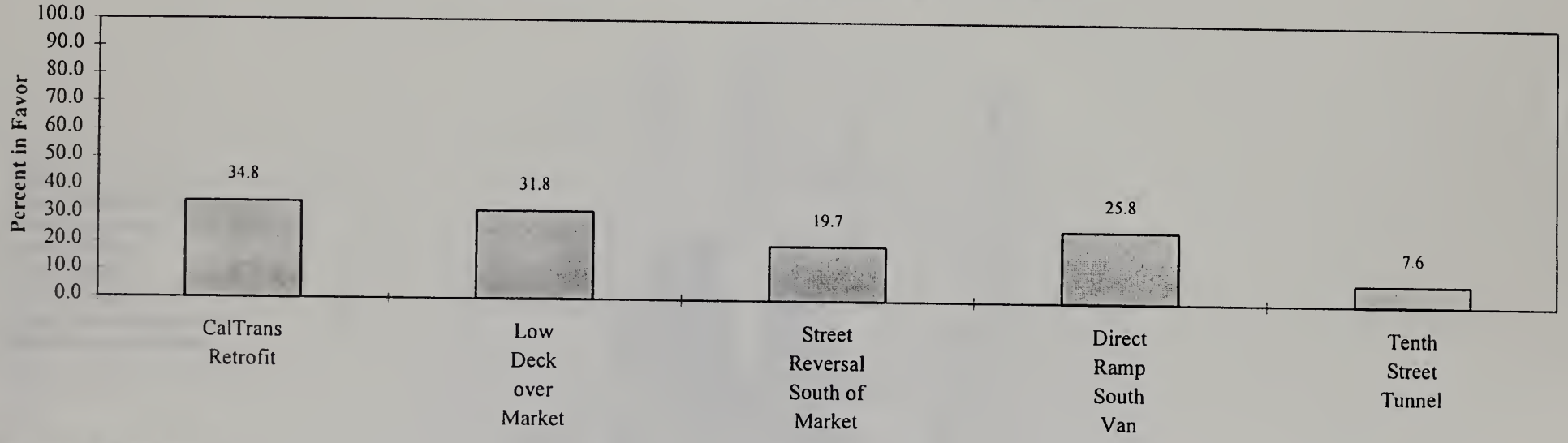
_____

_____

_____

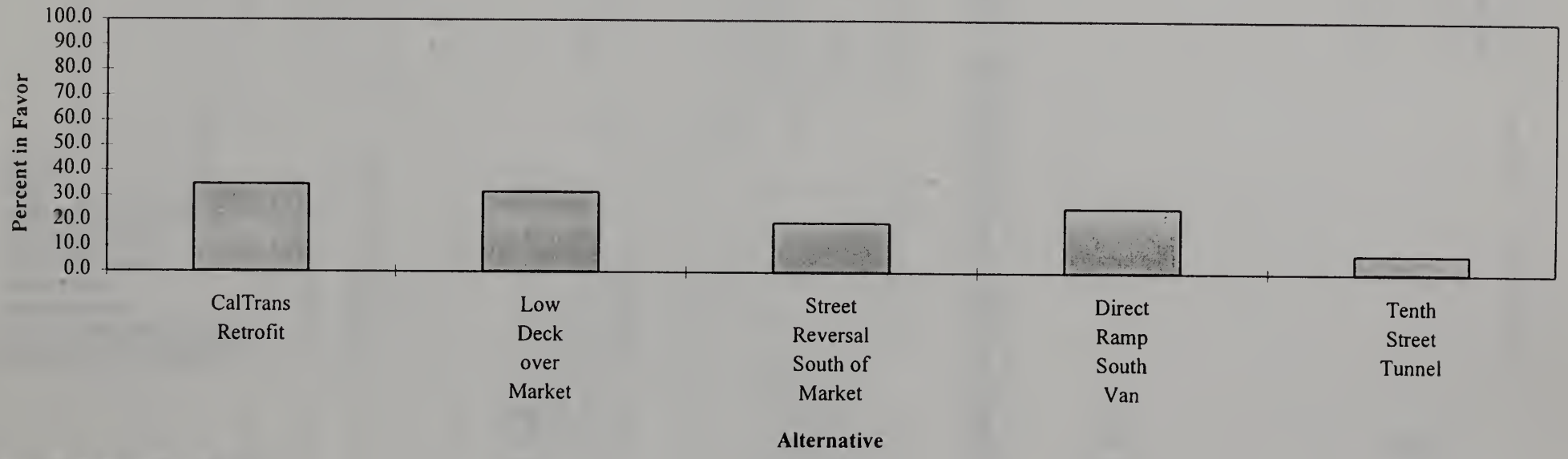
_____

## Responses to July 1995 Central Freeway Newsletter Comment Form
## Percentage of Respondents Favoring Each Alternative




| Responses By Neighborhood: | |
|---|---|
| Hayes Valley/Western Addition | 29 |
| Haight-Ashbury | 13 |
| South of Market | 7 |
| Sunset/Richmond | 6 |
| Mission/Noe Valley | 1 |
| Pacific Heights/Cow Hollow/Russian Hill | 4 |
| Other | 6 |
| TOTAL | 66 |

## Responses to July 1995 Central Freeway Newsletter Comment Form
## Percentage of Respondents Favoring Each Alternative

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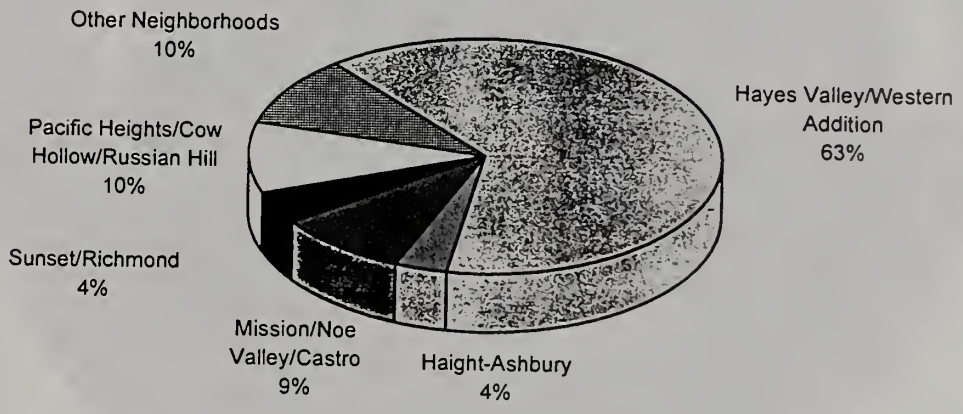
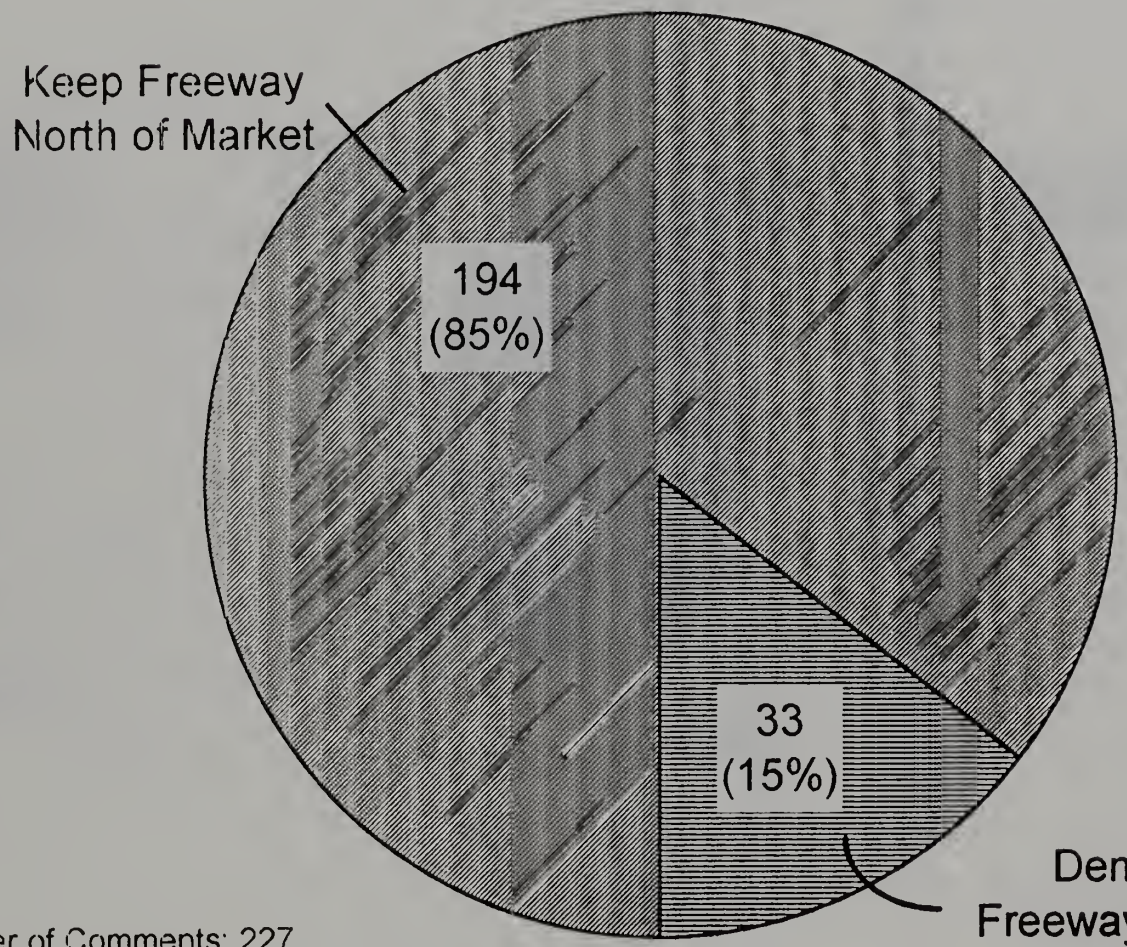
| Other | 6 |
| TOTAL | 66 |

## Responses to Central Freeway Alternatives, by Neighborhood




COMRESP3 Chart 3
Pittman & Hames Associates 11/9/95

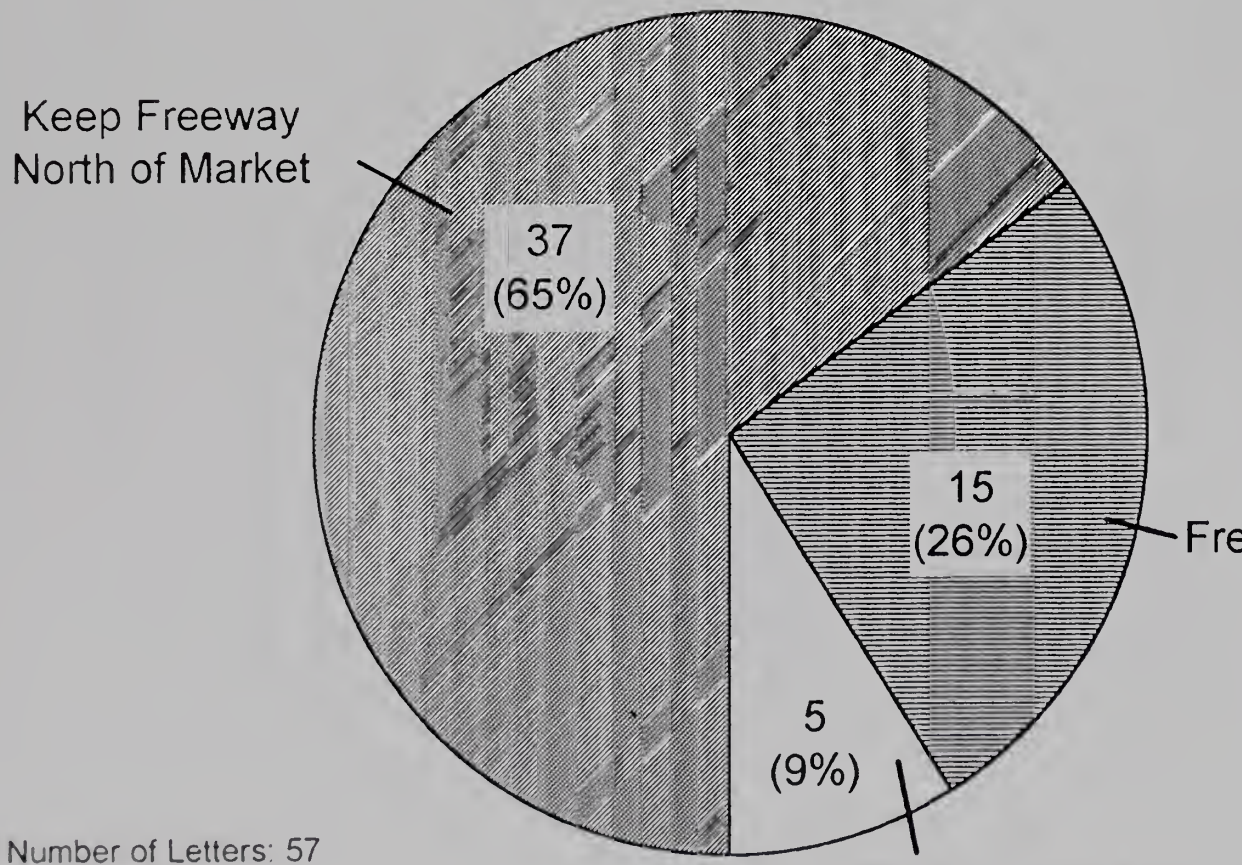
## Summary of Comments Received On Central Freeway Telephone Line (554-2397)




Total Number of Comments: 227
As of: September 8, 1995

Source: Department of Parking and Traffic

## Summary of Letters Received Regarding Central Freeway Alternatives




Total Number of Letters: 57
As of September 8, 1995

Source: Department of Parking and Traffic

# Citizens Advisory Task Force
for the
# Central Freeway

## April 3, 1995 - Meeting Minutes

1660 Mission Street, Room 2001 — 7:00-9:00 pm

| | | |
|---|---|---|
| **Task Force Chairperson:** | Wayne Corn (WC) | |
| **Task Force Members Present:** | Ian Ayers (IA) | David Heller (DH) |
| | Michelle Brant (MB) | Ephraim Hirsh (EH) |
| | Kate Carroll (KC) | Richard Johnson (RJ) |
| | Benard Choden (BC) | Judith Kaminsky (JK) |
| | Roddy Creedon (RC) | David Klein (DK) |
| | Lynn Creighton (LC) | Lonnie Lawson (LL) |
| | Fran DeNoto (FD) | Leland Meyerzove (LM) |
| | Craig Etlin (CE) | Steve Tabor (ST) |
| | Tom Girardot (TG) | Tom Radulovich (TR) |
| **Task Force Members Excused:** | Ron Miguel | |
| **Task Force Members Absent:** | Robert Czekala | Ceceila Shepard |
| | Mary Beth Frederick | Edward Spivak |
| | Linda Salas | Nancy Zimmer |
| **Task Force Members Inactive:** | Mary Austern | Lisa Foster |
| **Members of Public:** | Ric Duran | Mark Pope |
| | Jerry Goldberg | Michael Wisdom |
| **City Agencies/ Representatives:** | Peter Albert (PA), Department of City Planning<br>Ross Mirkarimi (RM), Aide, Supervisor Hallinan<br>Randy Riddle (RR), City Attorney's Office<br>Jerry Robbins (JR), Department of Parking & Traffic | |
| **Consultant Team:** | Donna Pittman (DP), Pittman & Hames Associates<br>Dick Tilles (DT), Wilbur Smith Associates | |
| **Quorum:** X Yes __No: | 28 Total Members/19 Members Present | |

## AGENDA ITEMS

### 1. INTRODUCTIONS - Wayne Corn, Chairperson

Self introductions by all meeting attendees.

### 2. CITY ATTORNEY BRIEFING - Randy Riddle, City Attorney's Office

Two laws govern Task Force meeting requirements: 1) state law, which is the Brown Act, and 2) local law which is the Sunshine Ordinance. Underlying policy for both laws is that bodies such as the Task Force have been created to serve the public, and the public has a right to be informed about Task Force

activities. According to the Brown Act, any body created by another legislative body (i.e., the Board of Supervisors) are subject to the Brown Act and subject to open meeting laws. Under the Sunshine Ordinance, there are further requirements under the tacit meeting rules for advisory bodies created by City Department heads or policy committees. Under tacit meeting rules, formal noticing is not required, but members of the public are entitled to attend meetings.

Open meeting laws apply whenever there is a quorum. Any time a quorum discusses issues (even if over the phone, in a serial fashion), open meeting laws apply. When there is less than a quorum, the Task Force cannot conduct itself as a formal body. If actions need to be taken when there is less than a quorum, then the meeting should be adjourned or continued to another time when a quorum is present.

For regular Task Force meetings, a notice and agenda must be posted at least 72 hours in advance of the meeting at the document section of the public library. The agenda must include a meaningful description of items that will be discussed, and if an action will be taken on that item. Generally, *only* matters listed on the agenda can be acted upon. In exceptional and extreme circumstances (i.e., action necessary to avoid public harm), the Task Force could agree by a 2/3 vote to act on item not on the agenda. In practice, if an item, not on the agenda, is raised by Task Force or members of the public that requires action, this item must be scheduled for action at a future meeting.

Members of the public have a right to discuss each item on the Task Force Agenda, as well as items not on the agenda but within the jurisdiction of the Task Force. The public is not required to sign in, but may be requested to do so. Also, members of the public are not required to identify themselves if they want to speak on an item. The public can video or tape record meetings if they wish. If the public is disruptive, the Task Force can clear the room.

Because the Task Force was not created under a charter amendment; special meetings can be held based on 24 hour notice. If meetings are held at other than the regular meeting location, then a 15-day meeting notice is required.

*Discussion*

(IA) What about continuing discussion of items. (RR) You can continue items discussed on the agenda within five days of a meeting without posting a notice.

(RC) Clarification on action versus discussion. (RR) If an item is not on the agenda, Task Force cannot discuss it. Item can only be discussed to the extent there is a decision to place item on future agenda. Agenda should be worded clearly to notify public that an item will be discussed or acted upon.

(LM) What about an extreme issue that needs immediate attention (e.g., legislative action that would effect project funding). (RR) Two thirds vote to place special item on the agenda would apply.

(PA) What about routine matters being placed on agenda (e.g., correction/adoption of meetings). (RR) In order to act, all matters should be placed on agenda.

(CE) Task Force is conducting a substantial amount of business at subcommittee meetings. (RR) If a quorum of Task Force shows up at a committee, then it is acting as the Task Force. The Task Force is a legislative body; Any subcommittee established by the Task Force is subject to same meeting notice requirements of the full Task Force (*even if no action is taken*).

(WC) What about requirements for Task Force being included at meetings held by City Departments and certain members of the Board of Supervisors where Task Force matters are discussed. (RR) There is no requirement if a quorum of the Board is not present.

(RR) Suggested that modifications to by-laws be calendared for a future meeting. By-laws cannot require that people resign from Task Force. Only the Board of Supervisors can request that someone resign from

Task Force. (WC) Clarified that intent of Task Force is to request resignation if more than three meetings are missed. (CE) By-laws will be revised to reflect City Attorney's issue.

*Public Comment*

Mark Pope, member of the public, expressed extreme concern that he has not been allowed to join Task Force because DPT has interpreted that he does not reside within the Western Addition. (WC) Suggested that Mark Pope contact Supervisor Shelley's office directly to clarify issue. Task Force and Ross Murkarimi will work with Mark to be placed on the Task Force.

## 3. PUBLIC OUTREACH WORK PROGRAM/ SCHEDULE - Donna Pittman, P&H

Presentation of draft public outreach work program and schedule concerning proposed meeting dates for Task Force and upcoming community meetings. Noted that schedule proposes review of Caltrans and Phase I alternatives at the April 18th Task Force meeting.

*Discussion*

(DT) Clarified that review of alternatives at April 18th meeting will cover several issues. Consultants need Task Force feedback on reviewing Caltrans retrofit alternative and Phase I alternatives. Also, need input on how alternatives will be developed with Task Force. Options include: 1) Consultants develop 4-5 alternatives for Task Force review, with Task Force developing another 2-3 alternatives during the charrettes; or 2) Start with a pool of 7 total alternatives, and work with Task Force to determine which alternatives should be included in study, drawing from Task Force, Caltrans and Consultants alternatives. Additional input needed on how the alternatives should be categorized (e.g., traffic versus design options).

(RC) Task Force had previously agreed to presentation of Caltrans' hybrid alternative, but not the Phase I study alternatives. Preferred that prior alternatives not be discussed at April 18 meeting. (DP) Requested that Task Force decide on whether prior alternatives should be discussed at April 18th meeting. (IA) asked that Dick Tilles also present criteria used to judge alternatives.

**Motion:** (WC) Should there be a brief overview of prior alternatives presented at April 18th Task Force meeting. Second: BC, CE

**Vote:** **Yes:** 18 **No:** 1

(WC) Raised issued if schedule meets dates formerly adopted by Task Force. (RC) Schedule has been revised to address Consultants request that basic alternatives are nailed down by May 1. (TR) Expressed concern that overall schedule was too rushed. (LM) Task Force needs to demonstrate that it can work within Board of Supervisors time line for study completion, and moved that draft work program and schedule be adopted. (DT) noted that six month study schedule officially began on March 7, 1995.

(RC) Restated concern that May 1st date may not allow for full community input prior to Task Force deciding on alternatives. (DT) Reiterated that the alternatives process is not finite, and that consultants should be able to start general study of alternatives endorsed by majority of Task Force on May 1, with further alternatives refinement after the May community meeting.

**Motion:** (LM) Task Force should adopt public outreach calendar, and submit it to the Board of Supervisors to notify them of the Task Force schedule. Second: JK

**Vote:** **Yes:** 15 **No:** 2

(PA) Discussion of providing DCP Master Plan conformance paper prior to design charrettes. Agreed to provide paper at April 18th Task Force meeting.

4. COMMITTEE REPORTS

a. Goals and Criteria - Craig Etlin

Presentation of goals and criteria developed by committee. Criteria were purposefully not prioritized. Noted that preferred alternative may not meet all criteria and will require trade-offs. Task Force needs to decide if goals will be used to select a preferred alternative or to rank the alternatives. Several criteria that will be used in consultant's study are not included, but are important (e.g., cost, sources of funding). Noted corrections to last word under the third bullet of the first criteria (neighborhoods) and that a bullet should be added to last criteria.

*Discussion*

(DT) Questioned if Task Force criteria are considered inclusive. At some point consultants will come back to Task Force with other criteria to be considered in study. Issue of funding. (TR) Raised issue of funding with respect to comparable service and referred to language in SB 181.

(CE) Committee felt that EIR requirement is not a legitimate criteria, because issue will likely be resolved politically. (IA) For credibility, all alternatives must work for other criteria as well, especially traffic.

(RC) Addressed criteria of good urban design under the first criteria; felt it was too broad and vague. (FD) Stated that good urban design meant freeway should be built in context of surrounding neighborhood.

(CE) Criteria will be modified by adding "Accumulate" to beginning of fifth criteria.

**Motion:** (EH) Task Force should adopt goals and criteria with noted corrections/additions.
Second: TR, LC

**Vote:** Yes: 16 No: 0

b. Funding and Legislation - Wayne Corn (on behalf of Bernie Choden)

Review of memo to Supervisor Hallinan requesting help to fund the Central freeway by 1): contacting Senator Kopp regarding earmarking the proceeds of Caltrans land sales or development rights from the Central Freeway and Terminal Separator; and 2) contacting Congresswoman Pelosi's office to discuss federal assistance for the Central Freeway from discretionary funds for a $128,000 for planning impact study; supplementary ISTEA funds, and $29 million of earmarked funding from FEMA.

c. Community Outreach - Judith Kaminsky

Committee will work with Donna Pittman and hold meeting regarding mailing list.

d. Design Charrette - Kate Carroll

(KC) Discussion of upcoming charrettes on 22 and 29th. Requested that Peter Albert and Donna Pittman assist in securing a location. Other members of the public are interested in attending, so noticing will be required.

e. Schedule - Roddy Creedon

(RC) Schedule already presented by Donna Pittman; no further items need to be addressed at this time.

**Meeting adjourned at 9:10 p.m.**

# Citizens Advisory Task Force
for the
# Central Freeway

## April 18, 1995 - Meeting Minutes

**1660 Mission Street, Room 2001** **7:00-9:00 pm**

**Task Force Chairperson Present:** Wayne Corn (WC)

| | | |
|---|---|---|
| **Task Force Members Present:** | Michelle Brant (MB) | Ephraim Hirsch (EH) |
| | Kate Carroll (KC) | Richard Johnson (RJ) |
| | Benard Choden (BC) | Judith Kaminsky (JK) |
| | Roddy Creedon (RC) | Ron Miguel (RM) |
| | Lynn Creighton (LC) | TomRadulovich (TR) |
| | Fran DeNoto (FD) | Steve Taber (ST) |
| | Craig Etlin (CE) | Nancy Zimmer (NZ) |
| | Tom Girardot (TG) | Cecelia Shepard (CS) |
| | David Heller (DH) | |
| **Task Force Members Excused:** | Ian Ayers | Leland Meyerzove |
| | David Klein | Edward Spivak |
| | Lonnie Lawson | |
| **Task Force Members Absent:** | Robert Czekala | Linda Salas |
| | Mary Beth Frederick | |
| **Task Force Members Inactive:** | Mary Austern | Lisa Foster |
| **Members of Public:** | Ric Duran | Michael Wisdom |
| | Mark Pope | |

**City Agencies/Representatives:**
Peter Albert (PA), Department of City Planning
Dennis Bosler (DB), Caltrans
Ross Mirkarimi (RM), Aide, Supervisor Hallinan
Jerry Robbins (JR), Department of Parking & Traffic
Jeff Weiss (JW), Caltrans

**Consultant Team:**
Donna Pittman (DP), Pittman & Hames Associates
Dick Tilles (DT), Wilbur Smith Associates

**Quorum:** X Yes __No — 30 Positions/28 Filled Positions/18 Members Present

**AGENDA ITEMS**

1. INTRODUCTIONS - Wayne Corn, Chairperson

Meeting participants declined self introductions due to time constraints.

2. TASK FORCE BUSINESS - Wayne Corn, Chairperson

a. **Adoption of March 27 and April 3, 1995 Meeting Minutes**
March 27th minutes considered for adoption as amended April 3rd; April 3rd minutes considered for adoption as written.

**Motion:** (RC) Task Force adoption of March 27th and April 3rd Minutes. **Second:** FD
**Vote:** **Ayes:** 18 **No:** 0

b. **Adoption of Revised By-Laws**

**Motion:** (NZ) Task Force adoption of revised By-Laws. **Second:** (EH)
**Vote:** **Ayes:** 18 **No:** 0

c. **Task Force and Committee Meeting Notification Requirements**
(DP) Because Task Force has been created by the Board of Supervisors, and has chosen to set up a committee structure, the committee meetings will be subject to notification requirement under the Brown Act and Sunshine Ordinance. Suggested that 2nd floor conference room at 1660 Mission be scheduled on a regular basis to allow committees to meet (e.g., every Wednesday or every other Wednesday). Some committees currently meet in the conference room one hour before the regular Task Force meeting, which is another option. Committee chairs would need to notify DP four days prior to scheduling a meeting.

*Discussion/ Questions*

(RC) Requested confirmation of date scheduled for May Community Meeting. (DP) Dates of May 16, 17th and 18th are reserved, pending a decision by Task Force.

**Motion:** (WC) Task Force approval of May 18th Community Meeting. **Second:** (RC)
**Vote:** **Ayes:** 18 **No:** 0

(WC) Further discussion of committee meeting dates. (RC) Requested that conference room be available at least one hour prior to regular Task Force meeting (i.e., 6:00 pm). (CE) Reserve room for every Wednesday for flexibility; room could be canceled when necessary. (DP) Available dates will be worked out with the building management, and a schedule provided to the Task Force.

2. CENTRAL FREEWAY ALTERNATIVES DEVELOPED TO DATE - Dick Tilles, WSA

Dennis Bosler (DB) of Caltrans presented the retrofit or hybrid alternative. Basic concept is a single-level structure. Alternative is preferred by Caltrans because it can be constructed with minimal inconvenience to freeway travelers, surface traffic and people who live near freeway structure. Retrofit of existing two-level structure was considered, but presently withdrawn because it would require closing one-direction of traffic, and substantial night and weekend work. Hybrid alternative is currently a concept; no detailed design has been completed.

The existing upper level would be kept open to traffic with two-lanes in one direction, and one lane in the opposite direction. Projects would be staged with reconstruction of the Oak/Fell ramps first; second stage would be a widening and new structure at a higher level, while on the south end a new upper level would be re-constructed; final phase is reconstruction of a new level on the north end. Caltrans is also examining feasibility of single-level structure on the lower level.

Project would be funded with Federal Highway Administration funds, and which requires comparable service that is more or less equivalent to service prior to the Loma Prieta earthquake. The number of lanes

is also being examined. The structure would be within the existing right-of-way. There can be two-lanes in each direction with standard lane (12 ft.) and shoulder widths (8 ft.). Also three-lanes could be accommodated with 11-ft lanes and five ft shoulders. Caltrans is awaiting alternatives from Task Force, before further development of hybrid alternative.

*Discussion/ Questions*

(BC) Is a profile available. (DB) Profile is not available, but currently perceived that profile would follow upper level of existing structure. (EH) Believes alternative is absurd. Has worked over three years on peer review panel which determined that a retrofit was not feasible. Alternative is directly counter to the peer review's finding. Questions Caltrans spending further money on an alternative that is not feasible.

(TR) How much does alternative cost and can it be built within existing right-of-way; is land acquisition required? (DB) Minor acquisitions would be needed, but no real property would be involved. Essentially would project would remain within existing State right-of-way. Cost would be $40 to $50 million.

(ST) In the context of comparable service, this alternative continues to dump traffic on Oak and Fell Streets and doesn't' provide connections to the north similar to pre-earthquake conditions. (DB) Surface streets to the north are beginning to provide comparable service in terms of travel times. (ST) But surface street traffic is *not* comparable in term of neighborhood impacts. (RJ) How long would retrofit require? (DB) About 1 1/2 years.

(BC) Professional committee studied issues of comparable service three years ago, with solution of going under Haight Street. Caltrans is invited to design charrettes on April 22 and April 29, so that Caltrans and Task Force don't waste time on alternatives that are unacceptable. (DB) Caltrans prefers to see what Task Force develops without being constrained by Caltrans institutional perspectives. (KC) Excellent suggestion that Caltrans participate in charrettes, especially during afternoon session. (WC) Task Force should write a letter and make a formal request that Caltrans attend the charrettes; would serve as a record of Task Force's cooperativeness.

(RJ) Freeway causes a lot of noise, pollution and social problems. Neighborhood would put up a tremendous fight if there is a retrofit alternative; they want to see the freeway torn down. (CE) Issue of increasing the existing two-lanes to three-lane capacity is more troublesome than retrofitting existing two-lane structure.

(Rick Johnson) Caltrans' priority with respect to comparable service. (DB) No single priority, but a combination of factors, such as travel times, traffic volumes, intersection congestion; one factor isn't considered more important.

b. **Presentation of Phase I Study Alternatives**

(RT) Overview of alternatives considered to date:

1. **Retrofit Alternative**. Retrofit of existing double-deck freeway structure with structural changes.
2. **Modified Retrofit Alternative.** Concept directs traffic from the north and eliminates problem intersection at Fell and Laguna, where on and off-traffic cross each other.
3. **Low Single Deck Alternative.** Concept involves rebuilding the concrete portion of freeway, and making it a low-level single-deck structure that crosses Market Street. Structure would be even lower than bottom level of existing freeway.
4. **Low Single Deck Options.** One option would close Haight Street; freeway would end at Page and become an arterial with Octavia as a local street. Other alternative would dip underneath Haight, which is kept open. Freeway would come up at Page or Oak at a signalized intersection. Option of closing Haight is less expensive, has better geometrics, but has problems because several buses operate

on Haight that would need to be diverted.

5. **Mission Street Terminus.** Ends freeway at Mission and comes down at grade. Will require detailed traffic analysis. Possibly a long-term solution with an arterial at grade within the freeway right-of way south of Market. Also, if there is a solution that demolishes freeway north of Market and rebuilding it in some manner, this alternative would probably be the interim construction solution.
6. **12th Street Exit.** Alternative created by previous Task Force. Terminates freeway at Market with an additional off-ramp at 12th Street. Has substantial traffic changes, particularly on Gough and Franklin streets, which are detailed in the Phase I Study.

*Discussion/ Questions*

(DT) Mentioned that a structural engineer is part of consultant team who has been examining issue of tunneling under Market Street. Preliminary analysis shows its not possible to tunnel over Muni, west of Van Ness. Possible to tunnel between Muni and Market, between the Van Ness and Civic Center metro stations. This would probably divert more traffic to Civic Center area. Also looked at a deep tunnel that would come off freeway and go over BART tunnel at Mission, but freeway would not surface until Grove which doesn't provide traffic solutions.

(BC) Requested that engineers look at open cut, box girder that would provide clearance over Muni.

4. UPDATE ON DESIGN CHARRETTE - Kate Carroll, Chair Design Charrette Committee

a. **Update on Charrette**

(KC) On Saturday, April 22, charrette would begin with overview, then walking tour. Return at noon for lunch and discussion. In the afternoon, teams develop alternatives. On the 29th, alternatives would be further refined and presented. Also, participants would rank alternatives based on goals and criteria and Master Plan goals. Goal is to develop list of alternatives to present to Task Force at May 1st meeting.

*Discussion/ Questions*

(TR) Spoke to Sue Olive at Muni; suggested that someone from Muni attend the charrettes to answer transit questions. (KC) Suggested that afternoon of April 29th would be the most beneficial. (WC) Suggested that Peter Straus should attend Task Force meetings. (JR) Agreed to invite Peter Straus to charrettes and May 1st Task Force meeting.

(FD) Questioned role of public at the charrettes. (KC) Public is invited to participate in groups and provide comments. (RM) Will there be public notices or newspapers notices for charrettes. (DP) Legal noticing requirements will be met. Also, meeting materials sent to Task Force members can be requested by members of the public. Additional copies will also be available at Task Force meetings.

b. **Overview of Master Plan Conformance**

(PA) Presented hand out of Master Plan elements in relationship to Central Freeway which provides references based on the Task Force's goal and criteria.

*Discussion/ Questions*

(WC) Status of Civic Center Master Plan. (BC) Civic Center Master plan is being continued by Planning Commission due to lack of funding for the completing the plan and EIR. Large portion of area affected by Central Freeway is within area of the Civic Center Master Plan. (WC) Concerned that Task Force work on the Central Freeway be included in the Civic Center element since its still in progress. (PA)

Requested that Task Force provide comments to him on the draft Transportation Element of the Master Plan and Civic Center element (to Susana Montana) relating to Central Freeway. (MB) Conflict between Van Ness Avenue Plan and draft Transportation element pertaining to Gough as a two-way street.

(DH) Are alternatives being considered due to funding. Money is available from Muni for Geary Boulevard corridor; can that money be used for Central Freeway. (DT) Basically no. Because Caltrans is now looking at alternatives that cost more than $29 million available, there is an indication that more funding may be available for the Central Freeway. (TR) If land is made available, does that money go back to Caltrans. (BC) Several options being explored to use proceeds from Caltrans land similar to what occurred for the Mid Embarcadero project under AB 181.

(RC) Noted that article was in April 18th Examiner which discusses possible redevelopment area between 4th Street and Van Ness Area on Market, including intersections of South Van Ness at corner of Howard and Mission. Possible funding opportunity that Task Force should explore.

5. OTHER COMMITTEE REPORTS

a. **Community Outreach - Judith Kaminsky, Chair**

(JK) Committee has had problems meeting due to noticing requirements. Requested Task Force members to supply community group mailing lists if available, particularly from Mint Hill, Duboce Triangle, Alamo Square, Richmond. (WC) Concerned that mailing list is not limited to only neighborhoods of immediate concern.

b. **Schedule Committee - Roddy Creedon, Chair**

(RC) Schedule adopted on April 3, 1995 is still in effect.

c. **Funding & Legislation - Bernie Choden**

(BC) Committee is currently talking to funding sources, but was not prepared to discuss at meeting. Later noted that a Funding & Legislation committee meeting would be held prior to regular May 1st Task Force meeting.

d. **Goals & Criteria - Lynn Creighton**

(LC) Nothing to note; revised goals and criteria as adopted on April 3rd are fine.

6. PUBLIC COMMENT

Mark Pope commented on goals and criteria regarding neighborhood cohesion and who would define neighborhoods. (CE) Goals and criteria have been adopted and unless Goals and Criteria committee wants to revise, they stand as adopted.

Ric Duran asked if media could be invited to Task Force meeting to develop interest in the Community Meeting, or if potential mayoral candidates could attend.

**Meeting Adjourned: 9:10 pm**

# Citizens Advisory Task Force for the Central Freeway

## May 1, 1995 - Meeting Minutes

**1660 Mission Street, Room 2001** **7:00-9:00 pm**

| | | |
|---|---|---|
| **Task Force Chair Present:** | **Wayne Corn** | |
| **Task Force Members Present:** | Ian Ayers | David Heller |
| | Kate Carroll | Richard Johnson |
| | Bernard Choden | Judith Kaminsky |
| | Roddy Creedon | David Klein |
| | Fran DeNoto | Tom Radulovich |
| | Craig Etlin | Steve Taber |
| | Tom Girardot | |
| **Task Force Members Excused:** | Michelle Brant | Lonnie Lawson |
| | Lynn Creighon | Leland Meyerzove |
| **Task Force Members Absent:** | Robert Czekala | Cecilia Shepard |
| | Mary Beth Frederick | Ed Spivak |
| | Ephraim Hirsch | Nancy Zimmer |
| | Ron Miguel | |
| **Task Force Members Inactive:** | Mary Austern | Lisa Foster |
| **Members of Public:** | Paul Burt | Mark Pope |
| | John Caldwell | Michael Wisdom |
| | Ric Duran | |
| **Public Agency Representatives:** | Peter Albert, Department of City Planning | |
| | Andy Nash , S.F. County Transportation Authority CAC | |
| | Carl Natvig, Muni | |
| | Jerry Robbins, Department of Parking & Traffic | |
| | Peter Straus, Muni | |
| **Media:** | Charles Augustine, City Voice | |
| **Consultant Team:** | Kim Franchi, De Leuw, Cather | |
| | Donna Pittman , Pittman & Hames Associates | |
| | Dick Tilles, Wilbur Smith Associates | |
| **Quorum:** _ Yes X No | 30 Total Positions/28 Filled Positions/14 Members Present | |

AGENDA ITEMS

1. INTRODUCTIONS - Wayne Corn, Chair

Wayne Corn (WC) introduced invited guest, Peter Straus, Director of Muni Service Planning Department. Also introduced Kim Franchi of De Leuw, Cather, member of consulting team who is conducting the engineering feasibility, construction staging and cost estimation work. Later during meeting, WC introduced Andy Nash of the San Francisco County Transportation Authority and Carl Natvig of Muni. Donna Pittman (DP) introduced Rosie Scott, who will be assisting her with Task Force meetings.

2. TASK FORCE BUSINESS - Wayne Corn, Chairperson

a. **Adoption of April 18, 1995 Task Force Meeting Minutes**

Minutes could not be adopted due to lack of quorum present. WC expressed concern about inactive members (i.e., Bob Czekala, Linda Salas, and Mary Beth Frederick).. Requested DP to write inactive members requesting either that they attend or submit their resignation. DP stated that City Attorney, Randy Riddle, maintains that Task Force quorum is 16, despite the fact that two of the 30 positions are unfilled.

b. **Schedule of Committee Meeting Dates**

DP provided Task Force members with copies of binders for organizing Task Force materials, noting that binders are divided into administrative (including schedule materials), meeting minutes, notices, agendas, community meetings, correspondence etc.

Administrative section of binder contains reserved dates for committee meetings. Room 2001 at 1660 Mission Street is reserved for Wednesdays through mid September from 6-9 pm, except for dates indicated with double asterisks, which indicates the room is scheduled from 7-9 pm. Also committees can meet between 6-6:45 prior to any regularly scheduled Task Force meeting. DP must have a minimum of a 4-day notice to schedule committee meeting for public notice requirements.

3. TASK FORCE ALTERNATIVES - Kate Carroll

Kate Carroll (KC) provided background of alternatives developed at Saturday design charrettes. Explained that Ian Ayers (IA) and Roddy Creedon (RC) would be providing more detail on those alternatives. Charles Augustine of City Voice asked about origin of 6 alternative drawings. KC responded that those were among the alternatives being discussed by Wilbur Smith from Phase I and included the retrofit and modified retrofit, neither of which are supported by Task Force, and the Mission Street Terminus and 12th Street exit, which are south of Market alternatives. Task Force members in that neighborhood didn't' like these alternatives and prepared new schemes that terminate freeway south of Market in a manner that is more acceptable to the neighborhood. Also there are two single-deck schemes which cross Market that seem to have general interest by the Task Force for further consideration. Task Force focused efforts on alternatives in the South of Market Street area.

IA stated that major negative aspect of south of Market alternatives in Phase I report was the inability to move traffic north of Market Street. Therefore, focused efforts on solutions that could do this in a

reasonable manner. One scheme would takes existing freeway and split it off in two directions, towards Van Ness and towards Octavia" boulevard" that would be constructed in area of existing freeway right-of-way. Traffic from freeway would be channeled onto a new "south" Franklin Street, which does not exist now and would require cutting through an existing block. Scheme would free up land for development. South Van Ness would become a freeway ramp. Other features include two-way Mission Street, and closing McCoppin. Other versions include ending all ramps at Mission, and going under Mission and Market Streets to provide a greater pedestrian area. Noted that Caltrans has said several times recently that south of Market schemes don't work because you cannot get the volume of traffic across north of Market.

RC presented graphics showing another scheme with basic premise of creating more at-grade crossings over Market Street. Proposed Task Force schemes reconfigure off-ramps for both 101 and I-80 to provide two northbound directions and one south bound (the current configuration is the opposite). Scheme proposes that one-way directions for a number of streets be reversed. This alternative is partly meant to address Caltrans concerns about stacking on the freeway. General premise is that traffic is split so the traffic coming north on 101 and west on 80 are not funnelled into one location but split to take a variety of paths through the City. The net result disperses traffic into a broader area. The two primary northbound routes would be Van Ness and Franklin. Alternatives considered land for redevelopment, major tree planting, and areas which could benefit from in-fill development.

RC closed with two points: 1) alternatives need to focus on larger area to get better use of streets. In doing so, the City has to be cooperative in reworking the street system, otherwise it will be a traffic nightmare; and 2) the City will need to work on issues of redevelopment, to add quality of life to neighborhoods that will bear the brunt of the traffic impacts.

In response to question from Carl Natvig of Muni concerning major street reversals, RC noted that 8th, 9th and 10th Streets and Fell, east of Franklin, would have major changes.

WC suggested that alternatives have broader considerations of what happens to traffic going out to Stanyon, Golden Gate Park etc.

Bernie Choden (BC) examined what would happen north of Market with the various south of Market schemes. Mentioned there was one 4-6 lane, single-deck proposal over Market Street, which translates into 18 lanes of surface traffic crossing Market Street at various points. Main concern is impacts on neighborhoods. What happens to Gough/Franklin area between Fell, Oak and Market Streets with south of Market alternatives. Also what happens to housing development opportunities areas north of Market. Looked at various schemes that would redesign the intersection of Van Ness to get direct traffic out to Lombard, or continued traffic to Turk and Golden Gate and out to Arguello, Stanyon etc. A Turk and Golden Gate connection to Geary could mean that a Franklin/Gough connection above Geary isn't needed. Also, if Octavia was used as a boulevard, there is a possibility that 9th and 10th StreetS could carry more traffic without having to cross Fell/Gough (this needs to be studied).

Tom Radulovich (TR) spoke on an amendment to scheme presented by RC, which would eliminate Octavia boulevard. Scheme is based on idea that Oak and Fell are not great ways to get to Richmond because they end at Golden Gate Park, forcing traffic through the park on Fulton. Idea is to de-emphasize Oak and Fell, in favor of Page and Oak. Also interested in further study of two-lanes in one direction and one lane in the opposite direction on both Oak and Fell. Oak traffic would come down Gough, to south of Market on ramp near McCoppin. Also proposes modifications to signal timing to facilitate traffic crossing Market. Transit lane would be continued down Van Ness and across Mission. Scheme works

well to get traffic to upper Market, and allows more land for opportunity sites.

WC invited Peter Straus of Muni to address transit issues pertaining to alternatives. There are long-term transit improvement plans, but cautioned that these plans should not be considered as short-term solutions or even as guaranteed in the long-term. Long term plans include the Geary Corridor project however, due to funding, it may be 15+ years before this becomes a real project. Transportation Authority has conducted a Citywide Rail Plan for the Geary, Bayshore, Chinatown, North Beach and Van Ness Corridors, with Geary and Bayshore identified as higher priorities. There are no formal priority 2 projects regarding construction . Chinatown is considered priority 3 which means you cannot consider it until priority 2 corridor projects are built. Van Ness is not even considered for construction money. Van Ness corridor was considered in the Citywide Rail Plan at a construction cost of $2 billion. The current best estimate is that there will be $5- 600,000 available for funding new projects. The Van Ness corridor is not even included for construction money. Van Ness is the lowest priority legislatively. Citywide Rail Plan will include a discussion of a subway under Van Ness to serve possibly light rail or trolley buses, but cautioned that this should not be given any given credence other than just a "line on the map." Task Force can support Van Ness project, but it is *very* long term.

Van Ness is a major traffic and transit artery, easily considered one of the 10 most important transit streets in the City. In the interim, something has to be done to improve transit operations on Van Ness. Any scheme that increases traffic on Van Ness must allow transit to function efficiently. Perhaps most effective way is to design a transit median along Van Ness which has implications for parking, traffic and signalization on Van Ness.

IA suggested that Van Ness buses be placed on Polk Street. Peter Straus responded that Polk is extremely congested and would be very difficult to change into a transit only street. Polk is considered a secondary transit street. It is also a local commercial street, which further complicates transit operations.

For all of the schemes, suggested that Task Force use Muni map to examine and begin working on solutions on how transit routes are effected. In theory there was discussion of bringing buses down Octavia to Market, but would be difficult with current configuration of street car tracks. Additional vehicles down Octavia down to Market will further impact transit on Market.

BC mentioned alternative that would cross Gough and feed into Valencia as a ramp. Peter responded that people turning left onto track while street cars are going straight would be a major conflict. This area has a high volume of street car/auto accidents.

WC thanked Kate Carroll and those who participated in the design charrettes for their hard work and efforts.

## 4. UPDATE ON MAY 18TH COMMUNITY MEETING - Donna Pittman, Pittman & Hames

### a. Meeting Goals , Format, and Agenda

WC asked if alternatives could be converted to slides, including alternatives developed by Task Force, for the May 18th meeting. Dick Tilles (DT) of Wilbur Smith Associates asked for copies of schemes presented by Design Charrette committee. He expressed need to simplify Task Force alternatives for public presentation. RC suggested Task Force members who developed schemes work with Dick Tilles to refine and interpret alternatives.

WC and Craig Etlin (CE) requested that these members work with DT by possibly meeting at Wilbur Smith offices. Fran De Noto (FD) and TR requested meeting prior to May 18th community meeting to review alternatives and final details of meeting format, agenda, and hand outs. After discussion, Task Force decided to meet on May 10th for joint meeting of the Design Charrette and Community Outreach committees for this purpose.

WC suggested that format of meeting include background on Task Force members. RC commented that first he would like for meeting to facilitate contacts between public and their representatives on the Task Force (e.g., a list of which areas Task Force members represent). Secondly, he would like to get input from the community at large on preferred alternatives. RC understands that the Task Force's charge is to solicit, evaluate and incorporate community input. DP commented that meeting location was auditorium style and could not accommodate a workshop format at which constituents could go to their Task Force representatives and ask questions or state concerns. RC also asked that DP provide a phone number or other way for public to contact Task Force members, but that Task Force phone numbers should not be distributed. FD suggested that handouts include Task Force goals and criteria with possible mail-back for comments.

Peter Albert (PA) suggested that Task Force should convey to the community that they are not being railroaded into accepting any suggestion and that their input is important. However, the community input is part of the process, and agrees with RC that the Task Force must decide (on their preferred alternative).

**b. Community Mailing, Media Contacts**

Judith Kaminsky introduced status of May 18th community meeting. DP thanked members of Task Force who have assisted with mailing lists, flyer distribution, and contacts. Stated that mailing list is approximately 1,400, and included mailing lists from SomaWest, South of Market Problem Solving Council, PAR, Mission District organizations, Panhandle, Mint Hill, Alamo Square, Laguna-Waller, Golden Gate Park Task Force, Neighborhood in Transition, and approximately 400 representatives from citywide groups. Also Oak/Fillmore neighborhood group distributed leaflets. Media contact with Western Edition, S.F. Independent, City Voice, Sun Reporter and Bay Guardian. Also John King of the Chronicle, and Jerry Adams of Examiner have been contacted, as well as radio and television news desks. DP felt strongly that meeting format should include mechanism to get written input from attendees. Details of handout will be worked out at the joint committee meeting on May 10th.

## 5. OTHER COMMITTEE REPORTS - Wayne Corn, Chair

**a. Funding & Legislation - Bernie Choden**

BC reported that funding is very tight. He and WC had meeting with Congresswoman Pelosi's office regarding status of FEMA money. Were told that it is possible that money could be rescinded if is not transferred from the Federal government to local jurisdictions. Also concerned that FEMA money is being given to other projects without alerting the Federal government. Congresswoman Pelosi's office confirmed that this has occurred in other cases. Requested Pelosi's office to verify status of Central Freeway FEMA money, and investigate the accountability of Caltrans to ensure that Central Freeway money will not be used for another project. BC and WC will also write to Senator Kopp regarding his suggestion that money from the sale of land within the Central Freeway right-of-way be used for the project instead of reverting back to Caltrans or designated to another project.

RC asked about other money to facilitate planning aspects of the Central Freeway project. RC and WC raised questions regarding the process Caltrans' uses for disposal of land (e.g., would land be turned over to Redevelopment Agency or another public agency). DT noted that Lillian Hames of Pittman & Hames has been working on funding issue, particularly to clarify status of estimated $40 million allocated to Central Freeway. DP suggested that funding and implementation issues be a major topic at a future meeting.

WC reported that BC, DT and he met with Carolyn Diamond, Executive Director of the Market Street Association. Association is interested in alternative schemes being developed for the project. Also met with Kofi Bonner, Executive Deputy Director of the Redevelopment Agency. Suggested that Mr. Bonner attend a future meeting to discuss possible role of the Redevelopment Agency in facilitating Central Freeway project.

**b. Goals and Criteria - Craig Etlin**

No report.

## 6. PUBLIC COMMENT

a. Paul Burt, resident of Potrero Hill, indicated that his neighborhood has not been included on Task Force. Potrero Hill will be impacted regardless of what alternative is chosen. Believes major objection to Central Freeway is the double deck structure. Suggested removing upper deck, and using lower deck for one-way traffic to south of Market. Another possibility is to create a solution that would go under Market Street. WC and DT stated that this alternative is under consideration. Also commented that people rely on Central Freeway to get to the Sunset and Golden Gate Park.

b. Mark Pope commented on the April 29th Design Charrette. He felt that meeting was disappointing. Also suggested that community meting include hand-outs for people to go home and think about. Requested a map which pinpoints residences of people who attend the community meeting. Stated his continued dissatisfaction with representation on the Task Force, indicating that Task Force largely represents the Hayes Valley/Western Addition. WC and RC reminded Mark Pope that Task Force representation was developed by Board of Supervisors and that issues should be taken up directly with the Board.

c. Ric Duran concurred with Mark Pope about having a hand-out with representative alternatives available at the May 18th meeting. Also recommended that people doing presentation need to practice and deliver concise answers in non-technical terms. Noted that Caltrans has a number of people specifically trained for public relations.

DT stated that he would be willing to do presentation, unless Task Force wants to presents their own alternatives. Several Task Force members concurred that DT should do presentations. RC suggested that alternatives should go through one source (i.e., DT) as long as there is a balanced understanding and presentation of alternatives. TR noted in closing that Central Freeway is more than a traffic decision, and that all schemes are trying to deal with quality of life issues which should be integrated into discussion of alternatives.

Meeting Adjourned at 9:40 pm.

# Citizens Advisory Task Force
# for the
# Central Freeway
## June 5, 1995 - Meeting Minutes

**1660 Mission Street, Room 2001** **7:00-9:00 pm**

**Task Force Chairperson Present:** Wayne Corn (WC)

| | | |
|---|---|---|
| **Task Force Members Present:** | Ian Ayers (IA)<br>Michelle Brant (MB)<br>Kate Carroll (KC)<br>Benard Choden (BC<br>Roddy Creedon (RC))<br>Lynn Creighton (LC<br>Fran DeNoto (FD)<br>Craig Etlin (CE) | Ephraim Hirsch (EH)<br>Richard Johnson (RJ)<br>Judith Kaminsky (JK)<br>David Klein (DK)<br>Lonnie Lawson (LL)<br>Tom Radulovich (TR)<br>Nancy Zimmer (NZ) |
| **Task Force Members Excused:** | Tom Girardot | Ron Miguel |
| **Task Force Members Absent:** | David Heller<br>Ron Miguel<br>Leland Meyerzove | Cecelia Shepard<br>Edward Spivak<br>Steve Taber |
| **Task Force Members Inactive:** | Mary Austern<br>Robert Czekala | Lisa Foster<br>Mary Beth Frederick |
| **Members of Public:** | Wendy Collins<br>Ric Duran<br>Jerry Goldberg | Dennis Hope<br>Luis Pardo |

**City Agencies/Representatives:**
Peter Albert, Department of City Planning
Robin Levitt, Hayes Valley Neighborhood Association
Huy Nguyen, Transportation Department (San Jose)
Thanh Phung, Transportation Department (San Jose)
Ross Markarimi, City Attorney's Office
Carl Natvig, Municipal Railway Planning
Jerry Robbins, Department of Parking & Traffic
Judy West, NEMIZ

**Consultant Team:**
Donna Pittman (DP), Pittman & Hames Associates
Dick Tilles (DT), Wilbur Smith Associates

**Quorum:** _X_ **Yes** __ **No** 30 Positions/28 Filled Positions/17 Members Present

# AGENDA ITEMS

## 1. INTRODUCTIONS - Wayne Corn, Chairperson

Wayne Corn (WC) brought meeting to order. Introduced Peter Albert (PA) from City Planning Department. The City Planning Dept. is working on a system to assist Task Force members with alternatives. PA introduced two interns from San Jose State, Huy Nuguyen and Thanh Phung. They will be working with the City Planning Dept. to work with the new system.
WC welcomed the guests from San Jose. WC introduced with pleasure to have Ross Mirkarmi from the Board of Supervisor Terrence Hallinan's office.

PA encouraged Task Force members to come to him and work through him to help get the job completed. PA also stated the importance of getting alternatives put together.

WC asked Ian Ayers (IA) if he has been in touch with PA. IA stated yes, he has and has provided a computer disk with alternatives.

----- It was stated that at the public meeting, there was a discussion about tunnels under Market Street which was confusing. Certain locations may be useful to have sections down Market that shows what is underground that constrains where tunnels can be placed. WC stated that some of the ideas were from Muni and Bart for elevation of underground area.

Dick Tillis (DT) stated that he can make the profile paper information available for Task Force members with explanation of the underground area.

## 2. TASK FORCE BUSINESS - Wayne Corn, Chairperson

### a. Adoption of April 18 and May 1, 1995 Task Force Meeting Minutes

Minutes can be adopted because Task Force members have a quorum. WC made a note to accept the minutes of April 18 and May 1. Donna Pittman (DP) asked members to make a note of correction that Ephraim Hirsch sent in for a correction on April 18 minutes. Also correction from April 18 minutes on page 3 of the minutes, a mistake was contributed to a comment from Richard Johnson which should be Ric Duran. If no one has any further correction, minutes can be adopted. EH stated that on the attendance record for May 1, 1995, he requested to be excused but was marked absent. A note was made to excuse EH.

**Motion by:** Ephriam Hirsh (FH) Task Force approval of April 18 and May 1, 1995.
**Second by:** Fran DeNoto
**Vote:** Ayes: 18 No: 0

### b. Quorum Requirements

WC asked DP if she wishes to speak regarding quorum requirements and status. DP stated that a couple of issues in Item B for Task Force Quorum. She asked Ross Mirkarimi (RM) to make the issue.

RM stated that the City Attorney quit. They are waiting for reassignment of work. Therefore, members will have to wait until a new assignment for a full report on quorums. DP stated she will continue to peruse the issues.

IA stated regarding the Task Force (TF) quorum, he wants to know if members can adopt a motion that TF members are operating under the premise that the number of filled seats are a contingency and that would be the basis of our quorum until we hear from the City Attorney's office. WC stated that this issue will be before the Rules Committee the next day. RM stated that this is rather a tough call because Randy Ritler, who has been advising them, said it was difficult because a number of seats created by legislation necessitates the proportion of what a quorum is based upon. It is important to get official resignations as soon as possible. IA asked if TF members can go to the Rules Committee and ask that the non vacated positions be struck? WC stated that Jerry (?) has agreed to reactivate his application if positions are available. He wants to become active again. RM said that should not be a problem reactivating someone's application but vacancies and resignations are not only before the Rules Committee but also the Mayor's approval is required. We need a ten day notice of the vacancies.

DP stated that Jerry Robbins (JR) can clarify because he has been in contact with Rosemary Little-Horanzy , Board of Supervisors. JR commented that the two positions not filled will be heard by Committee. DP verified that she has received two resignations, although four were sent out. The two resignations received were of the Mission and South Van Ness area, Mary Beth Frederick and Ed Spivak. Rosemary will post these positions today. Within ten days TF members can reactivate new applicants and process through her. DP further stated that Rosemary said as long as she receives the new applications by Friday, she has time to post the vacancies and any new resignations and reapplication can be facilitated by Friday. TF members can post vacancies and bring new appointees by May 20.

IA asked if we do not have people by the 20th, can we ask the Rules Committee to strike those positions? WC asked if IA wants to make a motion on that issues. IA stated yes, he is making a motion to that affect.

---- A concern was voiced that by meeting a number of people of task forces, it was made aware that there are a number of people interested in being on the committee but the process is exclusive. RM stated that you cannot strike positions from committee for request reconfiguration of the Task Force without legislative action. Some people may feel they are written from exclusion.

It was stated that a number of vacancies are from people that have left the country and cannot be reached or located. The TF members placed in their Bylaws that after three times absent from meetings, the TF requests to submit resignation and other meetings missed, the BOS to would take action. It is not understood why this would be a part of the Rules Committee handling. Need to understand the authority of the Rules Committee in relations to the BOS.

WC stated that the appointment process is subject to full Board approval. TF would have to submit resolution to that affect. RM said this issue is not entirely clear to him because it is a new project for him. He said if TF members can demonstrate they have earnestly attempted to make contact with absent members, but is not successful, TF members should make that appeal to the Rules Committee. RM said he has not problem speaking with Supervisor Shelley, Chair of the Rules Committee for advice and is certain the Supv. Shelley would refer him to the City Attorney's Opinion. IA stated that Bob Czekala made a big point about attendance and he has not attended any other meetings. If positions are filled with people who want to be active, we would not have a problem appointing new members.

c. Committee Members Participation

DP stated she has mailed out resignation letters and so far only Mary Beth Frederick and Ed Spivak have send her resignation. Mary Austern was willing to fax her resignation from Hawaii, but we have not received. DP will follow up. Regarding Lisa Foster, JR has been in contact with the Rules Committee and it is DP's understanding that a letter is written explaining to Supervisor Shelley that we have tried different attempts to reach her but cannot, as far as we know, she is still in England, can the TF members automatically resign her?

IA stated that given RM's comment, he will rescind his motion being that it required legislative action. WC asked JR if he needs further assistance to carry this issue to the Rules Committee tomorrow. JR stated that he will bring the issue to the Rules Committee.

WC mentioned that the TF members are spending a large amount of time on this subject and it seems the TF effort will be over before a decision is made. Let's move on, does anyone have any further comments. IA had one comment regarding the representative from South of Market who has attended one meeting since his first and is not serving his contingency. DP said she will send Leland Meyerzove a resignation letter.

## 3. Public Outreach - Donna Pittman, P&H, & Jerry Robbins, DPT

### a. Presentation Summarizing May 18th Community Meeting

DP passed out a summary of the May 18 community meeting and provided a brief overview of the results of May 18 meeting. She stated that JA will provide a brief overview on action the Department of Parking and Traffic has been taking in keeping communication open until next meeting in August. An issue was raised about TF members responsibility for community outreach on an ongoing basis.

DP discuss handout materials from meeting. Attendance summary are members from the public, city departments, etc. Item B is participation, an overview of neighborhood and represented organizations at meeting. A number of people attended for certain neighborhoods and for breakdown on where people are located, what organizations they are affiliated. On the attendance, the Hayes Valley residents were the most active attending the meeting, although a good effort was made to reach all districts. The responses on blue sheet indicate 117, 82 people responded including five or six people took the time to mail back, that did not fill form out at meeting. Another category was for questions, comments, or no opinion. DP asked TF members to look at all comments and how alternatives stacked up in terms of disliking alternatives. DP stated that Pittman and Hames completed work on how responses were tallied with respect to different neighborhood groups. In some instance such as South of Market were only four people. P&H did not tally on a formal basis but there were several neighborhoods like Cow Hollow (northern neighbors) & Russian Hill, some from Sunset who in general had some interest in keeping the freeway structure up. They want some type of retrofit freeway, per se but interested in a low deep tunnel or low deck alternative that would keep structure going across Market. What TF members have is a tally of all responses not based on neighborhoods. The letter mailed out to the public were mostly negative in regards to pulling down freeway. DP passed two additional letters from public where one of them was upset about the progress the TF members have made on the Central Freeway effort. The fact that the TF has been working on this project for many years and they are still looking at alternatives. The other letter is similar with concerns about demolishing the freeway, they would prefer the Central Freeway not to be demolished.

DP said the next page of handouts is something suggested by Kate Carroll and Mark (?) suggesting we give spacial distribution of where people came from at the committee. The material shows clearly where people reside with respect to the Central Freeway versus other areas of the City. Next, DP suggested that the TF members put their energy into advertising for the August

meeting because it is a useful tool. DP spoke about the pie diagram in handouts that indicate newspapers areas. A number from the chart is missing, please place the #1 before the 3 = 13%. DP suggested TF members look at efforts of percentage of advertising. She thinks the ramp sign was a bonus in terms of looking at advertising which will hopefully continue. The direct mailing was effective and also all were good but most people were made aware and by community meeting and organizations. Also include FD and RJ (leaf). The last item DP asked was for TF members to peruse the summary of public comments, which was distilled to the essence of what people had to say without having to go through pages and pages of comments. DP took the effort in summarizing the results. This is an overview of the summary report.

WC thanked DP, the report is well done. DP commented that Val M., from P&H is present and has credit on the report in terms of organizing and preparing the charts in a very nice format. WC stated that corrections on neighborhood organizations that he knows attended meeting such as Alamo Square but was not listed. DP said that is fine, she took information only from sign in sheets. She asked TF members if they know names of organizations present but did not sign in, please add there names. WC commented that all organizations when going to the BOS will be important. DP stated again to add names but officially information was gathered by organizations that signed in.

DP handed out material to members that were not present at community meeting which were going like hot cakes. DP turned the next item to JR.

**b. Update on Central Freeway Phone Lines & Ramp Signs - Jerry Robbins, DPT**

JR stated regarding the sign at corner of Fell and Laguna. City Planning placed the sign before the 18th meeting. Since then, JR has received an overload of phone calls after article in Independent Newspaper. City Planning has set up a Central Freeway hotline information phone. The number is (415) 554-2397. There is a recording for feedback. Callers are invited to leave name and address or be placed on mailing list and comments in writing. So fare 80% of respondents use freeway and need it, or it will take longer to get where going. Other 20% said to demolish freeway.

# Citizens Advisory Task Force for the Central Freeway

## July 10, 1995 - Meeting Minutes

**1660 Mission Street, Room 2001** **7:00-9:00 pm**

| | | |
|---|---|---|
| **Task Force Chair Present:** | **Wayne Corn** | |
| **Task Force Members Present:** | Ian Ayers (IA) | Richard Johnson (RJ) |
| | Michelle Brant (MB) | Judith Kaminsky (JK) |
| | Kate Carroll (KC) | Lonnie Lawson (LL) |
| | Bernard Choden (BC) | Leland Meryerzove (LM) |
| | Roddy Creedon (RC) | Luis Pardo (LP) |
| | Lynne Creighton (LC) | Tom Radulovich (TR) |
| | Fran De Noto (FD) | Steve Taber (ST) |
| | Craig Etlin (CE) | Judy West (JW) |
| | Ephraim Hirsch (EH) | Nancy Zimmer (NZ) |
| | Tom Girardot | |
| **Task Force Members Excused:** | Ron Miguel | |
| **Task Force Members Absent:** | David Heller | Linda Salas |
| | David Klein | Cecilia Shepard |
| **Members of the Public:** | Ricardo Arguello | Jim Houillion |
| | Ana Bolton, NOMPC | Beryl Magilavy |
| | John Caldwell | Ed Morgan |
| | Ric Duran | Alex Pineda |
| | Elizabeth Hathornthwaite | Mark Pope |
| **City Agencies/Representatives:** | Jose Luis Moscovich, SF Transportation Authority | |
| | Carl Natvig, Municipal Railway Planning | |
| | Jerry Robbins, Department of Parking & Traffic | |
| | Peter Straus, Municipal Railway Planning | |
| **Consultant Team:** | Karlita Gallego (KG) Pittman & Hames | |
| | Donna Pittman (DP), Pittman & Hames | |
| | Peter Martin (PM), Wilbur Smith Associates | |
| | Dick Tilles (DT), Wilbur Smith Associates | |
| **Quorum: X Yes __No** | 30 Positions/25 Filled Positions/19 Members Present | |

## AGENDA ITEMS - Major Items Discussed

### 1. INTRODUCTIONS - Wayne Corn, Chair

Wayne Corn (WC) called the meeting to order.

### 2. TASK FORCE BUSINESS - Wayne Corn, Chair

### a. Adoption of June 5, 1995 Task Force Meeting Minutes

Minutes were adopted with the following correction noted by Craig Etlin. Page 4, Item 4: Study Alternatives and Resolutions. There were five resolutions considered and only two were accepted, whereas minutes indicate that three resolutions were accepted by Task Force. Donna Pittman agreed to re-check minute tapes and issue a correction page.

**Motion:** **Bernie Choden** **Seconded:** **Craig Etlin**
**Vote:** **18 Yes 0 No**

### b. Welcome new Task Force members

Wayne Corn introduced two new Task Force Members, Luis Pardo who will represent the Mission and Judy West who will represent South Van Ness.

### c. Discussion of current Task Force Membership

Wayne Corn (WC) asked for the current status of the Task Force membership. Donna Pittman (DP) stated that there are five vacant positions on the Task Force, four of which are for the Hayes Valley / Western Addition and 1 vacancy for the American Institute of Architects (AIA). The seat for the AIA has to nominated formally by the president of the AIA and then it goes before the board. WC pointed out that there are no representatives from the North of Market area and many of the alternatives have the potential to affect the Tenderloin area. Also, current vacancies provide an opportunity to incorporate more people from North of Market or someone from the Bay Area Council.

Roddy Creedon (RC) offered a motion requesting the Board of Supervisors to convert the five remaining Hayes Valley/Western Addition seats to At-Large seats such as David Klein's seat or even delete these positions. WC asked if David Klein has resigned his position on the Task Force

Mark Pope (MP) noted that he and others in his neighborhood have been trying to get on the Task Force for some time now but have been excluded because they did not fit into a specific neighborhood category. He objected that, at this late date, the Task Force was willing to change these rules, and believes changing the seat designation would only serve to further delay the process.

WC hopes this will only be a two-step process so the rules committee would send to the Board the suggestion to change the seats to At-Large seats. DP informed the members that changing the seats will not enable new members to be seated for any August meetings due to procedures. However, she advised that the Task Force will carry on after the study is

completed in September, and that the citywide At-Large positions should be started now to ensure flexibility in the future in filling membership vacancies.

Craig Etlin (CE) agrees that the proposal to convert seats is reasonable as long as the At-Large seats do not exclude the Hayes Valley/Western Addition area or any other.

**Motion:** **Roddy Creedon** **Seconded:** **Ian Ayers**
**Vote:** **18 Yes 0 No**

**3. Role of S.F. County Transportation Authority on the Central Freeway Project - Jose Luis Moscovich**

**a. Overview of Congestion Management Plan and Relationship to Central Freeway Project**

Jose Luis Moscovich (JLM) begins by discussing the funding restrictions. The SFCTA is the administrator of Prop B which was passed in 1990 prior to the earthquake. As a result, Prop B makes no provisions for funding that could be used for the Central Freeway project. Prop B allocates $1 billion of funds from sales tax to fund specific transportation improvements of the City. The provisions are very strict about how Prop B money can be used.

The Transportation Authority was designated as the Congestion Management Agency (CMA) for the City and as such has a responsibility to put together a program which includes: 1) designating a network of streets, arterials, and freeway segments which will be known as the Congestion Management (CM) System; 2) to designate a level of service that is acceptable, including traveling speeds; 3) and monitoring conditions on the network and preventing them from deteriorating below the established standard.

The CMA is charged with creating a capital improvement program every 2 years which prioritizes the investment of federal and state money (other than Prop B money) for the purpose of maintaining the transportation system. Prioritization is decided by the Board of Supervisors (BofS) which acts as the board of directors for the Authority as CMA. In addition, legislation has added a multi-modal component and performance element.

Judy West asked how long the prioritization process takes. JLM responds that the process is very fast, about 2-4 months to go through the Board and then it goes to Metropolitan Transportation Commission (MTC) where it must compete with recommendations from other county CMAs. Ian Ayers (IA) asks if there are any other funds available other then federal or state that could be used to fund CF. JLM responds no.

Leland Meyerzove (LM) was concerned that MTC could reject the Task Force recommendation if it violated congestion management standards. JLM replies that the regional MTC is not likely to take an action without deferring to the local policy board (i.e., the BofS)

**4. Status of Study Alternatives - Dick Tilles and Peter Martin, Wilbur Smith Associates**

**a. Discussion of alternatives currently under study**

Peter Martin presented four drawings of alternatives to identify individual analysis of problem intersections and traffic flow. E. Haythornethwaite is concerned about additional traffic on Turk Street due to 911 emergency access. Carl Natvig of MUNI was also concerned about the effects on travel time and congestion.

**5. Consultant's Report**

**a. Discussion of traffic count survey and traffic simulation model**

Of the seven alternatives presented at the May community meeting: Alternative 7, the shallow of 10th Street tunnel has been deferred for analysis. There will be four traffic models which will cover the remaining six alternatives. The existing conditions model covers the two Caltrans retrofits alternatives, Alternatives 1 and 2. The second model for the shallow tunnel underneath Market Street (SF Tomorrow) covers the single-deck overcrossing of Market Street that goes underneath Haight Street and comes back up Oak and Fell Streets. The third and fourth models will address the two alternatives that came from the Task Force, reversing street directions south of Market and direct South Van Ness ramp connection.

**b. Discussion and schedule of upcoming Working Papers**

Technical Memoranda (TM) #4 should be distributed to the Task Force in one week depending on the outcome of a meeting with Jerry Robbins. TM #5 will also be distributed in one weeks time. The Task 12 has already begun and drawings of some of the alternatives will be prepared in conjunction with Stevens & Associates (urban design). TM #7 and #8 will be prepared and distributed in mid-August as part of the component to help the Task Force evaluate the alternatives. In TM #9 WSA will provide the Task Force with a comparison of alternatives with objective cost data and traffic impacts. For TM #10, WSA will make its preferred alternative available to the Task Force before the community meeting. Task 19, the Draft Final Report, will come out after the community meeting, based on the revised schedule (see item 7a below).

**6. Update of August 24, Citywide Meeting**

Due to change in scheduling, no update was provided (see item 7a below)

**7. Committee Reports**

**a. Schedule: Possible Revision of Schedule - Roddy Creedon**

Roddy Creedon presented several alternatives for revising of the scheduled Task Force and Citywide meetings. The main concern is whether or not the Task Force should narrow down the preferred alternatives prior to the citywide meeting, or whether all alternatives under study be presented to the community as in previous community meeting. After discussion the following schedule was adopted.

a. **Discussion of alternatives currently under study**

Peter Martin presented four drawings of alternatives to identify individual analysis of problem intersections and traffic flow. Each alternative is concerned about additional traffic on each street due to the Hayes Valley access. Carl Natvig of MUNI was also concerned about the effects on travel time and congestion.

**Motion:** **Roddy Creedon** **Seconded:** **Ian Ayers**

**Vote:** **18 Yes** **0 No**

5. **Consultant's Report**

a. **Discussion of traffic count survey and traffic simulation model**

Of the seven alternatives presented at the May community meeting: Alternative 7, the shallow of 10th Street tunnel has been deferred for analysis. There will be four traffic models which will test the remaining alternatives. The existing conditions model covers the two Caltrans retrofits alternatives, Alternatives 1 and 2. The second model for the shallow tunnel underneath Market Street (SF Tomorrow) covers the single-deck overcrossing of Market (SPUR) that goes underneath Haight Street and comes back up Oak and Fell Streets. The third model will address the two alternatives that came from the Task Force, reversing the directions south of Market and direct South Van Ness ramp connection.

3. **Role of S.F. County Transportation Authority on the Central Freeway Project - Jose Luis Moscovich**

a. **Overview of Congestion Management Plan and Relationship to Central Freeway Project**

Jose Luis Moscovich began by discussing the funding restrictions. The SFCTA is the agency that administers Prop B which was passed in 1990 prior to the earthquake. As a result, Prop B makes $1 billion of funds from sales tax to fund specific transportation improvements of the City. The provisions are very strict about how Prop B money can be used.

b. **Discussion and schedule of upcoming Working Papers**

The Transportation Authority was designated as the Congestion Management Agency (CMA) for the City and as such has a responsibility to put together a program which includes: 1) the signing of a network of streets, arterials, and freeway segments which will be known as the Congestion Management System, 2) to designate a level of service that will be acceptable, including traveling speeds, and monitoring conditions on the network and intervening when conditions fall below the established standard.

The CMA is charged with developing a capital improvement program every 2 years which will make its preferred allocation of federal and state money (other than Prop B money) for the purpose of the Transportation System Prioritization is decided by the Board of Supervisors (BoS) (sitting as the board of directors for the Authority as CMA. In addition, legislation has added a multi-modal component and performance element.

6. **Update of August 24, Citywide Meeting**

Judy West asked how long the prioritization process takes. JLM responds that the process is very fast, about 2 months, to go through the Board and then it goes to Metropolitan Transportation Commission (MTC) where it must compete with recommendations from other counties. Ian Ayers (IA) asks if there are any other funds available other then federal or state that could be used to fund CF. JLM responds no.

7. **Committee Reports**

a. **Schedule: Possible Revision of Schedule - Roddy Creedon**

Leland Meyerzove (LM) was concerned that MTC could reject the Task Force recommendations if they do not meet congestion management standards. JLM replies that the MTC is likely to take action without deferring to the local policy board (i.e., the BoS).

Roddy Creedon presented several alternatives for revising of the scheduled Task Force and Citywide meetings. The main concern is whether or not the Task Force should narrow down the preferred alternatives prior to the citywide meeting, or whether all alternatives under study be presented to the community as in previous community meeting. After discussion the following schedule was adopted.

4. **Status of Study Alternatives - Dick Tilles and Peter Martin, Wilbur Smith Associates**

*Revised Meeting Schedule*

| | |
|---|---|
| August 7 | Detailed Alternatives Analysis and WSA Working Papers |
| August 21 | Detailed Alternatives Analysis and WSA Working Papers |
| August 28 | Alternatives Evaluation |
| Week of September. 11 | Citywide Meeting |
| September 18 | Decision on Preferred Alternative |

**Motion:** **Bernard Choden** **Seconded:** **Ian Ayers**
**Vote:** **17 Yes 0 No 2 Abstentions**

**b. Public Outreach: Wording of Central Freeway Signs - Judy Kaminsky**

At the request of Judith Kaminsky, Richard Johnson announced the wording on the signs will state

**Fell Street Off-ramp:** This ramp's future? Remove, Replace, or Retrofit and include a phone number

**Mission/South Van Ness:** This freeway's future? Remove, Replace, or Retrofit and include a phone number

**Market Street Overpass:** (Pedestrian Level) This structure's future? Remove, Replace, or Retrofit and include a phone number

Ephraim Hirsch was concerned about the implications of the word retrofit. Luis Pardo has expressed a desire to see the sign at Mission Street to be in both English and Spanish. Jerry Robbins agreed to look into the possibility of a bilingual sign.

**8. Public Comment - Wayne Corn, Chair**

a. Ric Duran feels the community meeting could be announced by signage, similar to the Central Freeway signs. Also suggested that wording on signage be kept to a minimum and appear in English only.

b. John Caldwell (as read by Donna Pittman) finds it difficult for members of the public to attend meetings, and feels the public process would be greatly aided if the Task Force could mail a synopsis of the current proposals including maps people on the mailing list at least 2 weeks in advance of the community meeting, thus enabling people to digest the information before they are asked to voice an opinion. Also suggested putting together a presentation that could perhaps air on Channel 54.

Wayne Corn closed meeting, and reminded Task Force members that they agreed to a rigorous meeting schedule in August, and their meeting attendance will be critical

**Meeting adjourned: 9:35 pm**

# Citizens Advisory Task Force for the Central Freeway

## August 7, 1995 - Meeting Minutes

**1660 Mission Street, Room 2001** **7:00-9:00 p.m.**

| | | |
|---|---|---|
| **Task Force Chair Present:** | **Wayne Corn** | |
| **Task Force Members Present:** | Ian Ayers (IA) | Ephraim Hirsch (EH) |
| | Kate Carroll (KC) | Richard Johnson (RJ) |
| | Bernard Choden (BC) | Judith Kaminsky (JK) |
| | Roddy Creedon (RC) | Lonnie Lawson (LL) |
| | Lynne Creighton (LC) | Luis Pardo (LP) |
| | Robert Daniels (RD) | Mark Pope (MP) |
| | Fran De Noto (FD) | Cecilia Shepard (CS) |
| | Craig Etlin (CE) | Judy West (JW) |
| | Fredia Hall (FH) | Nancy Zimmer (NZ) |
| | David Heller (DH) | |
| **Task Force Members Excused:** | Tom Girardot | |
| | Tom Radulovich | |
| **Task Force Members Absent:** | Michelle Brant | Ron Miguel |
| | David Klein | Linda Salas |
| | Leland Meryerzove | Steve Taber |
| **Members of the Public:** | Greg Brueggeman | David Jordan |
| | Larry Elowitz | Beryl Magilavy |
| | Eric Joe | Victor Widmer |
| | Mark Jolles | Michael Wisdom |
| **Public Agencies/Representatives:** | Peter Albert, The Planning Department | |
| | Orlando Elizondo, UCSF | |
| | Maria Lombardo, SF County Transportation Authority | |
| | Carl Natvig, Muni | |
| | Peter Straus, Muni | |
| **Consultant Team:** | Karlita Gallego (KG) Pittman & Hames | |
| | Lillian Hames (LH) Pittman & Hames | |
| | Donna Pittman (DP), Pittman & Hames | |
| | Peter Martin (PM), Wilbur Smith Associates | |
| | Dick Tilles (DT), Wilbur Smith Associates | |
| **Quorum: X Yes __No** | 30 Positions/28 Filled Positions/20 Members Present | |

## AGENDA ITEMS - Major Items Discussed

**1. INTRODUCTIONS - Wayne Corn, Chair**

Wayne Corn (WC) called the meeting to order, and introduced the new Task Force members: Robert Daniels, Fredia Hall, and Mark Pope all representing Western Addition/Hayes Valley.

**2. TASK FORCE BUSINESS - Wayne Corn, Chair**

At WC's request, Lillian Hames of Pittman & Hames provided a brief overview of the work program for the funding analysis. Potential sources that will be examined includes: 1) revenue from sale of property as occurred for the mid-Embarcadero project; 2) project funding under the ISTEA legislation; 3) appropriation of Emergency Relief (ER) funds; and 4) potential funding from the proposed MTC regional sales tax on fuel, slated for the ballot next fall.

Also noted that the Central Freeway project is not included in the Transportation Authority's Prop B Expenditure or its Strategic Plan. Currently, in order to receive funding under Prop B, the Central Freeway would have to take funds from one or several projects.

**a. Adoption of June 5, 1995 Task Force Meeting Minutes**

Minutes were adopted with the following correction noted by Fran De Noto. Page 3, Item 3 a. Role of SFCTA on the Central Freeway Project. Prop B was passed in *1989* prior to the earth quake, by Bernard Choden, Page 4, Item 5 a. Discussion of traffic count survey and traffic simulation model. The third sentence should read: The second model for the shallow tunnel underneath Market Street covers the single-deck *(SF Tomorrow)* crossing of Market Street that goes underneath Haight Street and comes back up Oak and Fell Streets.

| | | | |
|---|---|---|---|
| **Motion:** | **Roddy Creedon** | **Seconded:** | **Bernard Choden** |
| **Vote:** | **20 Yes 0 No** | | |

**b. Update on Task Force Membership (as read by Donna Pittman for Jerry Robbins)**

The Rules Committee appointed three new members from Western Addition. Supervisor Hallinan introduced legislation for the remaining two vacancies and all future vacancies could be filled by at-large positions.

A second Central Freeway telephone line has been created at the request of Luis Pardo. This line will be in Spanish and Luis is working with Jerry on the translation.

The freeway signs are scheduled to be and will be up by next week. Also, several responses have been received from the Central Freeway Newsletter. These will be distributed to the Task Force when a sufficient number has been collected.

Roddy Creedon would like for the Outreach Committee to draft a letter in response to all of the letters and inquiries to acknowledge their receipt.

**Motion:** Roddy Creedon **Seconded:** Lonnie Lawson
**Vote:** 20Yes 0 No

**3. Consultants Report**

**a. Overview and Discussion of Technical Memoranda #4 and #5**

Peter Martin discussed and answered questions regarding these two memorandas.

**b. Presentation and discussion of Traffic Model Runs, Construction Costs, and Market Street Analysis.**

Handouts were provided by Dick Tilles, these handouts are subject to revision and are only preliminary.

**4. Committee Reports**

**a. Funding & Legislation (Bernie Choden)**
This task is being handled by Lillian Hames who will prepare a subsequent working paper.

**b. Design Charrette (Kate Carroll)**
Nothing to report, other than North of Market Planning Coalition would like the Task Force to make a presentation to their Zoning Board on August 30th. Kate also toured the Tenderloin area on August 5, to with Terry Hogan to discussed their concerns.

**c. Community Outreach (Judith Kaminsky)**
Reported that the committee will work on drafting a letter or postcard in response to people who have written letters.

**d. Schedule (RoddyCreedon)**
Nothing to report.

**e. Goals and Criteria (Lynne Creighton)**
Nothing to report.

Craig Etlin (CE) noted that he would like to develop and aid in voting for alternatives by the Task Force. CE will work on this and report to the committee on August 21, 1995.

Wayne Corn closed meeting, and issued an invitation to the new members to join any of the Task Force committees.

**Meeting adjourned approximately: 9:30 p.m.**

# Citizens Advisory Task Force
# for the
# Central Freeway

## August 21, 1995 - Meeting Minutes

**1660 Mission Street, Room 2001** **7:00-9:00 pm**

| | | |
|---|---|---|
| **Task Force Chair Present:** | **Wayne Corn** | |
| **Task Force Members Present:** | Ian Ayers (IA)<br>Michelle Brant (MB)<br>Kate Carroll (KC)<br>Bernard Choden (BC)<br>Lynne Creighton (LC)<br>Fran De Noto (FD)<br>Craig Etlin (FD)<br>Tom Girardot (TG)<br>Fredia Hall (FH)<br>Ephraim Hirsch (EH) | Richard Johnson (RJ)<br>Judith Kaminsky (JK)<br>Lonnie Lawson (LL)<br>Luis Pardo (LP)<br>Mark Pope (MP)<br>Tom Radulovich (TR)<br>Linda Salas (LS)<br>Steve Taber (ST)<br>Nancy Zimmer (NZ) |
| **Task Force Members Excused:** | Leland Meyersove | Ron Miguel |
| **Task Force Members Absent:** | Roddy Creedon<br>Robert Daniels<br>David Heller | David Klein<br>Cecilia Shepard<br>Judy West |
| **Members of the Public:** | Ric Duran<br>Robin Levitt<br>Daniel Nosal | Stephanie Rosh<br>David Saldivar |
| **Public Agencies/Institutions:** | Lori Yamauchi, UCSF | |
| **Media:** | Alan Saracevic, City Voice | |
| **Consultant Team:** | Donna Pittman (DP), Pittman & Hames<br>Peter Martin (PM), Wilbur Smith Associates<br>Dick Tilles (DT), Wilbur Smith Associates | |
| **Quorum: X Yes __No** | 30 Positions/28 Filled Positions/19 Members Present | |

**AGENDA ITEMS - Overview of Major Items Discussed**

**1. <u>INTRODUCTIONS</u> - Wayne Corn, Chairperson**

Wayne Corn called the meeting to order, and introduced Lori Yamauchi representing the University of California, San Francisco.

**2. <u>TASK FORCE BUSINESS</u> - Wayne Corn, Chairperson**

**a. Adoption of August 7, 1995 Task Force Meeting Minutes**

Motion: Bernie Choden Seconded: Tom Girardot
Vote: 18 Yes 0 No

b. **Update on Central Freeway Ramp Signs and Hot Line**

Jerry Robbins of DPT reported that signs have been placed in the vicinity of the Fell Street ramp, Mission/South Van Ness ramp, and on Market Street underneath the freeway. Flyers in English and Spanish have been posted on Market and Mission to attract pedestrian interest. A Spanish speaking hotline is in operation (554-2369). TAC meeting is scheduled for Thursday, September 7, 2:00 pm, DPT offices.

3. **CONSULTANTS REPORT - Dick Tilles, Wilbur Smith Associates**

a. **Presentation of Urban Design Analysis**

Dick Tilles presented urban design perspectives prepared by Stevens Associates. Perspectives were prepared for the alternatives to depict the two most prominent views: 1) views down Market St. toward the Ferry Building; and 2) views of the freeway along the Octavia corridor. Drawings will be refined and included in final report. Several questions were raised regarding consistency among drawings, and provisions for local frontage streets, pedestrian crossings, signals and turn lanes.

Tom Radulovich asked about status of the Otis/Duboce terminus scheme, which was included in the Task Force resolution, but eliminated from further analysis. Wayne Corn and Kate Carroll asked that the matter be resolved after the meeting or with the Design Charrette committee.

b. **Discussion of Technical Memoranda**

Peter Martin presented Technical Memorandum #6 which summarizes the methodology and results of the traffic analysis, based on the results of the CORFLO traffic simulation model. Task Force members, particularly Ian Ayers, had a number of detailed questions regarding traffic volumes and assignments for various alternatives. Wayne Corn asked that Task Force members provide detailed comments in writing so the consultants can revise Technical Memo #6.

Dick Tilles presented Technical Memorandum #9 - Alternatives Comparison. He noted that Alternative 4, Deep Tunnel and Alternative 7, 10th Street Tunnel were not analyzed at the same level of detail as the other alternatives.

4. **DISCUSSION OF SEPTEMBER 14 CITYWIDE MEETING - Donna Pittman, P&H**

Craig Etlin presented several options for ranking and selecting a preferred alternative. Detailed discussion and final recommendations were referred to the Goals & Criteria Committee, if possible. Discussion of objectives and format of citywide meeting was deferred to the Public Outreach Committee.

5. **COMMITTEE REPORTS**

Ross Mirkarimi, Supervisor Hallinan's aide, reported on a meeting held with the Planning Department and Redevelopment Agency staff. He also urged that the Task Force begin scheduling meetings in advance with the Board of Supervisors and various commissions so the study could be completed by October. TR, BC, NZ, KC, RJ, and WC volunteered to work on the Task Force report that will be presented to the Board.

6. **PUBLIC COMMENTS**

Stephanie Rosh, speaker for the 300 block of Oak Street, requested that the Task Force consider a modification to Alternative 3 which would allow a buffer between freeway-bound traffic and local Oak Street traffic. A flyer depicting this modification was provided to the Task Force.

**Meeting adjourned: 9:45 pm.**

# Citizens Advisory Task Force for the Central Freeway

## September 11, 1995 - Meeting Minutes

**1660 Mission Street, Room 2001** **7:00-9:00 p.m.**

| | | |
|---|---|---|
| **Task Force Chair Present:** | **Wayne Corn** | |
| **Task Force Members Present:** | Ian Ayers (IA) | Richard Johnson (RJ) |
| | Michelle Brant (MB) | Judith Kaminsky (JK) |
| | Kate Carroll (KC) | Lonnie Lawson (LL) |
| | Bernard Choden (BC) | Leland Meyerzove (LM) |
| | Roddy Creedon (RC) | Luis Pardo (LP) |
| | Lynne Creighton (LC) | Mark Pope (MP) |
| | Fran De Noto (FD) | Tom Radulovich (TR) |
| | Craig Etlin (CE) | Cecilia Shepard (CS) |
| | Tom Girardot (TG) | Steve Taber (ST) |
| | Fredia Hall (FH) | Judy West (JW) |
| | Ephraim Hirsch (EH) | Nancy Zimmer (NZ) |
| **Task Force Members Excused:** | | |
| **Task Force Members Absent:** | Robert Daniels | Linda Salas |
| | David Heller | |
| **Members of the Public:** | Jon Bohm | Mark Jolles |
| | Gordon Chester | Norman Rolfe |
| | Ric Duran | Patricia Walkup |
| | Ed Evans | Michael Wisdom |
| **Public Agencies/Institutions:** | Dennis Bosler, Caltrans | Carl Natvig, Muni |
| | Orlando Elizondo, UCSF | Jerry Robbins, DPT |
| | Ross Mirkarimi | Peter Straus, Muni |
| **Consultant Team:** | Karlita Gallego, Pittman & Hames Associates | |
| | Donna Pittman, Pittman & Hames Associates | |
| | Dick Tilles (DT), Wilbur Smith Associates | |
| **Quorum:** X Yes __No | 30 Positions/26 Filled Positions/23 Members Present | |

**AGENDA ITEMS - Highlights of Major Items Discussed**

1. **INTRODUCTIONS - Wayne Corn, Chairperson**

   Wayne Corn called the meeting to order, and thanked members of the public for their attendance.

2. **REVIEW OF ALTERNATIVES - Wayne Corn, Chairperson**

A) Adoption of August 28 and September 11, 1995 meeting minutes were distributed to the Task Force. Because there was insufficient time to send out the minutes in advance, Donna Pittman asked that the Task Force review the minutes and adopt the minutes toward the end of the meeting.

B) Status of Task Force Report: Tom Radulovich distributed a draft report for review, indicating that it could not be completed until an alternative was selected. The draft report must be completed by Thursday, September 21, 1995 for the Board of Supervisors Housing and Land Use Committee.

3. Review of Public Comments on Alternatives - Jerry Robbins and Donna Pittman
Jerry Robbins presented handouts summarizing: 1) hotline comments and 2) letters sent to DPT. 85% of the hotline comments favored the freeway structure, 15% of the comments favored tearing the freeway down. Most calls were probably in response to signs near the freeway. Jerry agreed to add the responses received after the September 14, Community Meeting. Donna Pittman presented the sum of the responses from the July newsletter and the September 14 Community Meeting. 35% favored a retrofit alternative followed by 32% in favor of a low-deck over Market Street. Out of 66, 29 were from Hayes Valley/ Western Addition neighborhood. Responses to the September 14 comment sheet, indicated 55% in favor of Alternative 9, out of 113 responses, Donna Pittman also cautions that all the responses received do not represent the universe, but should be noted as they represent people who have opinions and are willing to call, write a letter or return a form.

4. Task Force selection of a Preferred Alternative - Craig Etlin asked that the elimination of Alternative 5 be reconsidered. Several Task Force members, Craig Etlin, Steve Taber, and Ephraim Hirsch commented that Alternative 9 has not been studied sufficiently, and reflected strong Hayes Valley support. These gentlemen also felt it wasn't appropriate. Kate Carroll commented that Alt. 8 was an attempt to make a viable South of Market Alternative that would simplify construction and bring down costs.

Roddy Creedon pointed out that Alternative 8, as currently configured, did not separate I-80 and 101 traffic.

Lee Meyerzove noted that Alternative 8 may be the best political solution, and should probably be used as a basis for refinement.

Dick Tilles distributed supplemental Traffic and Cost Analysis of Alternative 8. DT noted that Level of Service F would occur at the Mission/South Van Ness intersection and some refinement of Alternative 9 was needed.

Peter Albert passed out a matrix for the Task Force to evaluate Alternative 3, 8, and 9 based on Task Force criteria. Motion was made to complete evaluation matrix using , "+" for positive and "-" for negative and a check for neutral.

**Motion: Roddy Creedon Seconded: Lee Meyerzove Vote: 16 Yes 1 No 4 Abstentions**

Motion was made to eliminate Alternatives #9 from consideration. Task Force members discussed the pros/cons of Alternative 9.

**Motion: Steve Taber Seconded: Mark Pope Vote: 11 Yes 11 No 0 Abstentions**

Motion failed.

Several motions were discussed concerning adoption of Alternative 8. The Task Force discussed whether Alternative 8 included an underpass or boulevard treatment on Octavia. The issue was also raised of better decking construction to Gough and Franklin.

Motion was made to adopt Alternative 8 with decking, or surface Octavia treatment to be further studied with particular attention to those most directly affected in the Octavia Street Corridor, and further study in the EIR process concerning separation of I-80 and 101 traffic.

# Citizens Advisory Task Force for the Central Freeway

## August 28, 1995 - Meeting Minutes

**1660 Mission Street, Room 2001** **7:00-9:00 pm**

| | | |
|---|---|---|
| **Task Force Chair Present:** | **Wayne Corn** | |
| **Task Force Members Present:** | Ian Ayers (IA) | Richard Johnson (RJ) |
| | Michelle Brant (MB) | Judith Kaminsky (JK) |
| | Kate Carroll (KC) | Lonnie Lawson (LL) |
| | Bernard Choden (BC) | Luis Pardo (LP) |
| | Roddy Creedon | Mark Pope (MP) |
| | Lynne Creighton (LC) | Tom Radulovich (TR) |
| | Craig Etlin (FD) | Linda Salas (LS) |
| | Tom Girardot (TG) | Cecilia Shepard (CS) |
| | Fredia Hall (FH) | Steve Taber (ST) |
| | David Heller (DH) | Judy West (JW) |
| | Ephraim Hirsch (EH) | Nancy Zimmer (NZ) |
| **Task Force Members Excused:** | Fran DeNoto | Leland Meyerzove |
| **Task Force Members Absent:** | Robert Daniels | |
| **Members of the Public:** | Joe Andes | Tom Lear |
| | Greg Bureggemann | Robin Levitt |
| | Howard Burrows | Beryl Magilavy |
| | Gordon Chester | Dick Nelson |
| | Ric Duran | Norman Rolfe, SFT |
| | Ed Evans, NOMPC | Stephanie Rosh |
| | Mark Jolles | |
| **Public Agencies/Institutions:** | Peter Albert, DCP | Jerry Robbins, DPT |
| | Carl Natvig, Muni | Lori Yamauchi, UCSF |
| **Media:** | Michael Martin, Western Edition | |
| **Consultant Team:** | Donna Pittman (DP), Pittman & Hames Associates | |
| | Peter Martin (PM), Wilbur Smith Associates | |
| | Dick Tilles (DT), Wilbur Smith Associates | |
| **Quorum: X Yes __No** | 30 Positions/26 Filled Positions/23 Members Present | |

**AGENDA ITEMS - Highlights of Major Items Discussed**

1. **INTRODUCTIONS - Wayne Corn, Chairperson**

Wayne Corn called the meeting to order, and introduced Ed Evans of the North of Market Planning Coalition (NOMPOC).

2. TASK FORCE BUSINESS - Wayne Corn, Chairperson

a. Adoption of August 21, 1995 Task Force Meeting Minutes

**Motion: Nancy Zimmer** **Seconded: Tom Girardot**
**Vote:** 16 Yes 0 No

b. Schedule of Upcoming Commission Meetings

Jerry Robbins reported schedule for following meetings: 1) DPT Commission meeting, September 5, 4pm; 2) Public Transportation Commission, September 12, 5:00 pm; 3) City Planning Commission, September 14, 2pm; 3) Redevelopment Commission, September 19, 4pm; and 4) Board of Supervisors Housing and Land Use Committee, September 21, 10am.

3. CONSULTANTS REPORT - Dick Tilles, Wilbur Smith Associates

a. Presentation and Discussion of Technical Memoranda

Dick Tilles reviewed Technical Memorandum #7, Construction Staging. He noted that the Duboce/Otis Terminus alternative was costed at $45 million which is less expense than most of the other alternatives. Construction staging assumes that the schedule would not be expedited (e.g., working at night); and that traffic would be able to operate during construction. Technical revisions to Technical Memos #9 and #6 were summarized. A number of Task Force members (IA, RC, EH, LP, TR) had detailed questions on the methodology and data presented in the memos.

b. Presentation and Discussion of Preferred Alternative

Wayne Corn distributed correspondence from the Board of Supervisors to Caltrans which states that the Task Force has the responsibility to select a preferred alternative that will be recommended to the Board. Wayne Corn requested a motion that Technical Memo #10, Preferred Alternative, be withdrawn and rewritten to reflect the Task Force recommendations and ranking as stated in Task 18 of the consultants Work Scope.

**Motion: Bernie Choden** **Seconded: David Heller**
**Vote:** 20 Yes 2 No

Dick Tilles presented main reasons for consultants' selection of Alternative 3, Low Deck over Market Street. Traffic problems are resolved within the existing freeway corridor (i.e., streets outside of corridor are not effected as in other alternatives); eliminates traffic crossing Market Street at grade (that has excess capacity of only 5% between Sixth and Laguna). Also has opportunity to implement traffic improvements during construction, which could alleviate long-term traffic problems South of Market, and in the Hayes Valley area.

4. TASK FORCE SELECTION OF PREFERRED ALTERNATIVE - Craig Etlin

Craig Etlin directed Task Force members in casting a straw vote for a preliminary ranking of alternatives that would be presented at the September 14 Citywide Meeting. A subsequent vote would be taken by Task Force at the September 18 meeting, subject to input from the public on the 14th. Members were requested to make one minute statements regarding their selection, and then fill out a ballot form. Tom Radulovich requested that the Otis/Duboce alternative be included in the voting, as the Task Force formally adopted this alternative for consideration.

The following preliminary tally was reported by Peter Albert to Wayne Corn, subject to re-count and verification by D. Pittman.

RESULTS OF STRAW VOTE BALLOT

| ALTERNATIVE NUMBER | Preliminary Vote Tally 8/28 | Ranking | Final Vote Tally (verified 9/6) | Ranking |
|---|---|---|---|---|
| 1 Single-Deck Retrofit | 7 | 7 | 7 | 5 |
| 2 Double-Deck Retrofit | 12 | 6 | 12 | 6 |
| **3 Low-Deck Over Market** | **105** | **1** | **99** | **3*** |
| 4 Deep Tunnel Under Market | 13 | 5 | 12 | 6 |
| **5 Freeway Traffic Dispersal** | **101** | **3** | **107** | **1*** |
| 6 Direct Ramp to S. Van Ness | 73 | 4 | 72 | 4 |
| **D Otis/Duboce Terminus** | **103** | **2** | **103** | **2** |

* Note change in ranking from preliminary vote tally.

Task Force Members Voting: 22; 1 abstention. (23 Task Force Members present out of 26 filled positions)

Craig Etlin made motion (seconded by David Heller) that Task Force vote on preferences for: 1) a South of Market alternative; 2) Alternative 3; or 3) "Something Else." After discussion, the motion was subsequently withdrawn.

5. **SEPTEMBER 14 CITYWIDE MEETING - Judith Kaminsky**

Judith Kaminsky reported on proposed format of the September 14 meeting. Following an introduction, there would be a brief discussion of the study background and purpose. Next, there would be a presentation of all of the alternative under consideration. Representatives of Task Force would then present their ranking of alternatives, followed by public comments. Donna Pittman mentioned that she would like a form for members of the public to fill out that indicated their support for various alternatives.

6. **PUBLIC COMMENTS**

Several members of the public commented on the various alternatives and the proposed format of the September 14 Citywide Meeting.

**Meeting adjourned: 9:50 pm.**

**Motion: Craig Etlin** **Seconded: Roddy Creedon** **Vote: 17 Yes 5 No 1 Abstentions**

Task Force reviewed draft of Task Force Report that would be presented to the Board of Supervisors. Wayne Corn requested that Task Force members fax their comments directly to Tom Radulovich, and interested persons to meet with TR on Tuesday night.

Craig Etlin raised the issue regarding Item I-6 concerning Franklin and Gough Street traffic, and Item I-9 regarding Caltrans Performance bond. After discussion, TR agreed to modify the language

Task Force members stated that the report should emphasize the Task Force 's desire for continued involvement in the process once an alternative is selected.

Wayne Corn initiated discussion of whether Task Force should have a position regarding inclusion of the Central Freeway project in the Redevelopment Area. WC specifically requested a sense of direction from the Task Force that could be presented to the Redevelopment Commission on September 19. Most members were reluctant to make a formal statement in the report, but didn't object to discussion at the Commission meeting.

5. Public Comments
Due to the late hours, members of the public declined to comment.

**Meeting adjourned: 10:20 p.m. (approximately).**

# Citizens Advisory Task Force for the Central Freeway

## September 18, 1995 - Meeting Minutes

**1660 Mission Street, Room 2001** **7:00-9:00 p.m.**

| | | |
|---|---|---|
| **Task Force Chair Present:** | Wayne Corn | |
| **Task Force Members Present:** | Ian Ayers (IA) | Richard Johnson (RJ) |
| | Michelle Brant (MB) | Judith Kaminsky (JK) |
| | Kate Carroll (KC) | Lonnie Lawson (LL) |
| | Bernard Choden (BC) | Leland Meyerzove (LM) |
| | Roddy Creedon (RC) | Luis Pardo (LP) |
| | Lynne Creighton (LC) | Mark Pope (MP) |
| | Fran De Noto (FD) | Tom Radulovich (TR) |
| | Craig Etlin (CE) | Cecilia Shepard (CS) |
| | Tom Girardot (TG) | Steve Taber (ST) |
| | Fredia Hall (FH) | Judy West (JW) |
| | Ephraim Hirsch (EH) | Nancy Zimmer (NZ) |
| **Task Force Members Excused:** | None | |
| **Task Force Members Absent:** | Robert Daniels | Linda Salas |
| | David Heller | |
| **Members of the Public:** | Jon Bohm | Mark Jolles |
| | Gordon Chester | Norman Rolfe |
| | Ric Duran | Patricia Walkup |
| | Ed Evans | Michael Wisdom |
| **Public Agencies/Institutions:** | Dennis Bosler, Caltrans | Carl Natvig, Muni |
| | Orlando Elizondo, UCSF | Jerry Robbins, DPT |
| | Ross Mirkarimi, Supervisor Hallinan's Office | Peter Straus, Muni |
| **Consultant Team:** | Karlita Gallego, Pittman & Hames Associates | |
| | Donna Pittman, Pittman & Hames Associates | |
| | Dick Tilles (DT), Wilbur Smith Associates | |
| **Quorum:** X Yes __No | 30 Positions/26 Filled Positions/23 Members Present | |

**AGENDA ITEMS - Highlights of Major Items Discussed**

**1. INTRODUCTIONS - Wayne Corn, Chairperson**

Wayne Corn called the meeting to order, and thanked members of the public for their attendance.

2. REVIEW OF ALTERNATIVES - Wayne Corn, Chairperson

a. Adoption of August 28 and September 11, 1995 Meeting Minutes

Minutes were distributed to the Task Force. Donna Pittman stated there was insufficient time to send out the minutes in advance, and asked that the Task Force review the minutes during the meeting, and adopt them toward the end of the meeting.

b. Status of Task Force Report.

Tom Radulovich distributed a draft report for review, indicating that it could not be completed until an alternative was selected. The draft report must be completed by Thursday, September 21, 1995 for the Board of Supervisor' Housing and Land Use Committee.

3. REVIEW OF PUBLIC COMMENTS ON ALTERNATIVES - Jerry Robbins and Donna Pittman

Jerry Robbins presented handouts summarizing: 1) hotline comments and 2) letters sent to DPT. 85% of the hotline comments favored retaining the freeway structure, while 15% favored tearing the freeway down. Most calls were probably in response to signs near the freeway. Jerry agreed to add the responses received after the September 14, Community Meeting.

Donna Pittman presented the summary of the responses from the July newsletter and the September 14 Community Meeting. 35% of the newsletter respondents favored a retrofit alternative followed by 32% in favor of a Low-deck over Market Street alternative. Out of 66 responses, 29 were from Hayes Valley/ Western Addition neighborhood. Responses to the September 14 Community Meeting comment sheet, indicated 55% in favor of Alternative 9, out of 113 responses. Donna Pittman commented that although the responses received do not represent the universe, they should be considered by the Task Force as they represent people who have opinions and were willing to call, write a letter, or return a form.

4. TASK FORCE SELECTION OF A PREFERRED ALTERNATIVE - Wayne Corn, Craig Etlin

Craig Etlin asked that the elimination of Alternative 5 be reconsidered. Several Task Force members commented that Alternative 9 has not been studied sufficiently, and was strongly biased toward Hayes Valley support.

Kate Carroll commented that Alt. 8 was an attempt to make a viable South of Market Alternative that would simplify construction and bring down costs. Roddy Creedon pointed out that Alternative 8, as currently configured, did not separate I-80 and 101 traffic. Lee Meyerzove noted that Alternative 8 may be the best political solution, and should probably be used as a basis for refinement.

Dick Tilles distributed supplemental Traffic and Cost Analysis of Alternative 8. He noted that Level of Service F would occur at the Mission/South Van Ness intersection and some refinement of Alternative 9 was needed.

Peter Albert passed out a matrix for evaluation of Alternatives 3, 8, and 9 based on Task Force criteria. A motion was made to complete the evaluation matrix using , "+" for positive, "-" for negative and a check for neutral.

**Motion: Roddy Creedon Seconded: Lee Meyerzove Vote: 16 Yes 1 No 4 Abstentions**

A motion was made to eliminate Alternatives #9 from consideration. Task Force members discussed the pros/cons of Alternative 9.

**Motion: Steve Taber Seconded: Mark Pope Vote: 11 Yes 11 No 0 Abstentions**

Motion failed.

Several motions were discussed concerning adoption of Alternative 8. The Task Force discussed whether Alternative 8 included an underpass or boulevard treatment on Octavia. The issue was also raised regarding a better connection to the Gough and Franklin corridors.

A motion was made to adopt Alternative 8 with decking or surface Octavia treatment to be further studied with particular attention to those most directly affected in the Octavia Street Corridor, and further study in the EIR process concerning separation of I-80 and 101 traffic.

**Motion: Craig Etlin Seconded: Roddy Creedon Vote: 17 Yes 5 No 1 Abstention**

The Task Force reviewed a draft of Task Force Report that would be presented to the Board of Supervisors. Wayne Corn requested that Task Force members fax their comments directly to Tom Radulovich, and interested persons to meet with Tom on Tuesday night.

Craig Etlin commented on I-6 concerning Franklin and Gough Street traffic, and Item I-9 regarding a Caltrans Performance Bond. After discussion, Tom Radulavich agreed to modify the language.

Task Force members stated that the report should emphasize the Task Force 's desire for continued involvement in the process once an alternative is selected.

Wayne Corn initiated discussion of whether the Task Force should have a position regarding inclusion of the Central Freeway project in the Western Addition or Lower Market Redevelopment Area. WC specifically requested a sense of direction from the Task Force that could be presented to the Redevelopment Commission on September 19. Most members were reluctant to make a formal statement in the report, but didn't object to a discussion at the Commission meeting.

## 5. PUBLIC COMMENTS

Due to the late hour, members of the public declined to comment.

**Meeting adjourned: 10:20 p.m.**